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### ABSTRACT

The booklet is reported to be designed for use as a source book by individuals concerned with establishing special needs vocational education programs to train mentally and physically handicapped students in semi-skilled occupations. General considerations presented cover the goal of releasing human potential, overall objectives of the program, psychological guidelines relating to knowing the child, readability of the textbook, curriculum guidelines, and evaluation procedures. Curriculum areas then included are health occupations, landscaping, graphic arts, plant maintenance, welding, driver education, small engine mechanics, domestic appliance repair, business occupations, auto mechanics, and auto body mechanics. Usually provided for each curriculum entry are a course description, listing of performance objectives, course outline, and operational notes. Concluding information concerns student personnel services, placement and program counselor, and psychologist. Appended are a chronology of the special needs program and operational forms.  
(CB)

ED 064823

# A Program for Training

• Driver Education

• Domestic Appliance Service

• Plant Maintenance • Small Engine Mechanics

• Automobile Mechanics • Health Occupations

• Business Occupations • Auto Body Mechanics

• Graphic Arts • Welding

• Landscaping

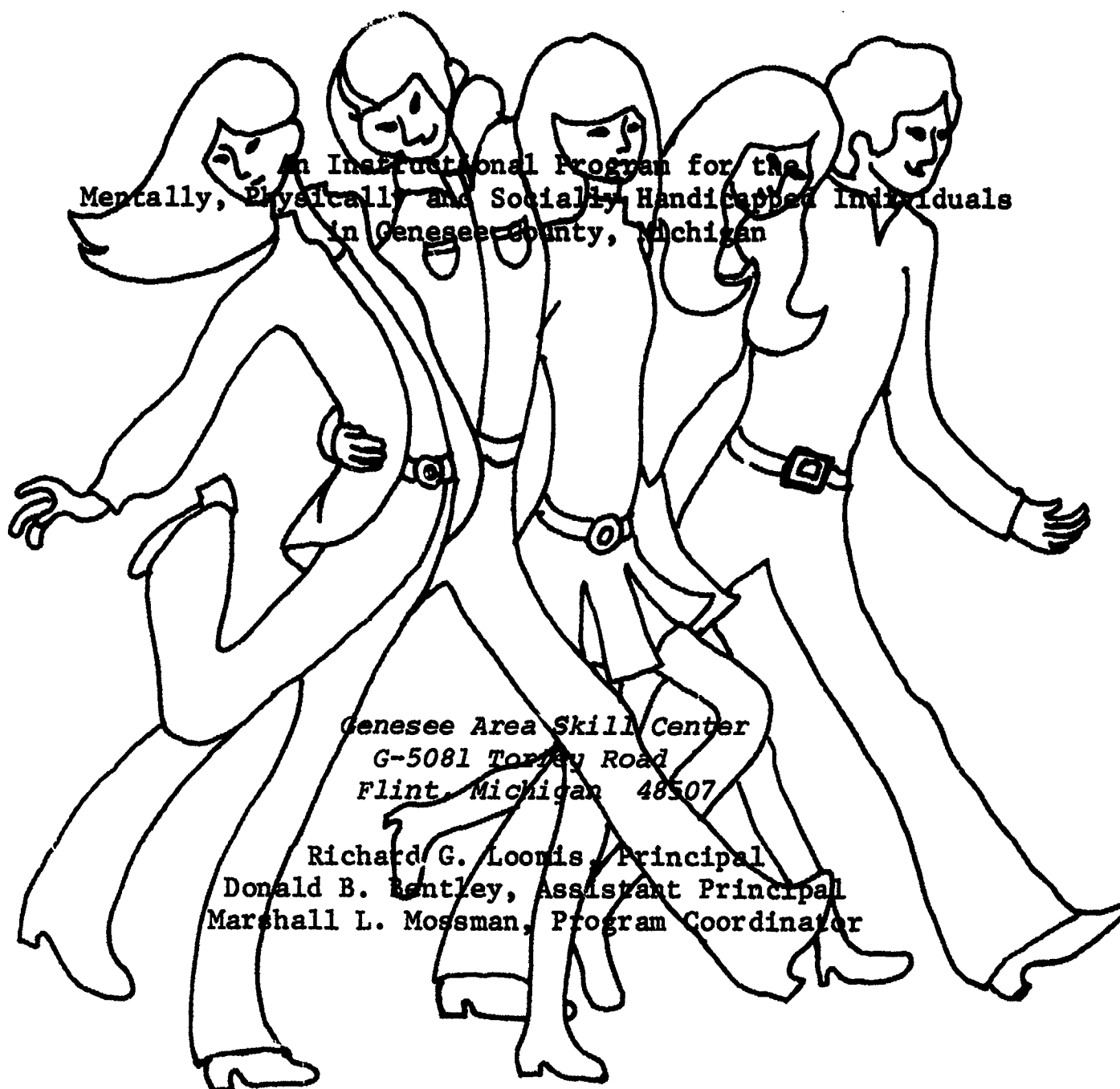
the Student with Special Needs

Genesee Area Skill Center

G-5081 S. Torrey Rd. Flint, Mich. 48507

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# SPECIAL NEEDS PROGRAM



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**Genesee Area Skill Center  
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## ACKNOWLEDGMENTS

Creating a Special Needs Program was not an ordinary task; no model or pattern existed, therefore there was no precedent to follow. To design, to test, to implement an instructional program demanded the resources and inventiveness of a devoted staff. The contributions and efforts of the following persons are gratefully acknowledged.

### Teachers

Auto Body Mechanics  
Auto Mechanics  
Small Engine Mechanics  
Welding  
Domestic Appliance Repair  
Graphic Arts  
Business Occupations  
Health Occupations  
Landscaping  
Plant Maintenance  
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## FOREWORD

Following birth, an idea, an organism, a person or program undergoes growth and maturation. That the Special Needs Program has grown is obvious: the program has grown in numbers of students and teachers, in new courses, in expanded content. Continued program development brings into focus the process of maturation; i.e., awareness of new implications, goals, and relationships.

Without minimizing the practical goal of acquiring salable skills, new insights reveal or reemphasize the compelling need of these students for developing affective components ... attitudes, values, self-confidence, and self-image. This "new dimension" of the Special Needs Program can be expressed as Humanizing Vocational Education.

Teachers will become increasingly aware of the psychological characteristics and needs of the students in the Program. Future inservice training will stress the "humanizing" aspect of teaching, regarding the student first and foremost as a person.



## RELEASING HUMAN POTENTIAL

Teachers can judge the growth in special skills; counselors can note the improvement in adjustment to school; only parents can discern the subtle or dramatic changes in the affective side of the student's personality ... his feelings, attitudes, values, and self-image. As illustrated by the following quotes, the message from ninety-five percent of the parents is loud and clear: "Keep the program going. You're on the right track. We know!"

"This course has changed his attitude toward everything."

"He likes the Skill Center a lot. That is all he talks about."

"The Skill Center Program has given him confidence in himself and he is more willing to try different things that before he thought he couldn't do."

"He can at last achieve at something!"

"Self-confidence is what Bob needed."

"Wayne has been very eager to go to the Skill Center each day. After his father died, he seemed to lose all interest in life. The Skill Center did a tremendous job helping him over this hurdle. School has been hard for him. The Skill Center seems to be a joy."

"George is more at ease with adults, even strangers. Now he really wants to learn to read and really applies himself."

"For the first time Wendy has had something to work toward, something beyond regular classroom work."

"The program has given Dawn some hope for future employment ... a new perspective for the future."

"Robert has found that he can do something by himself. He has found out how other kids act."

"Andrew looks forward to going to school more than ever before."

"Louise has taken more of an interest in school and she has raised her marks considerably."

"James now wants to finish school. He seems to understand that it is possible for him to earn good money."

"The program has been a great blessing for my son was on the verge of quitting school. The Center has saved him from being a dropout. The program has saved his education. He has come from straight E's on his report card to C's and B's and high C's at that. We know it certainly has made him into a different young man."



## GENERAL OBJECTIVES

The humanistic approach is a necessary concomitant of the program's stated philosophy and objectives. What is called for is a planned implementation of everything that "humane-ness" implies.

The general objectives may be stated in a chronological manner to exhibit the developmental nature and purpose of the Special Needs Program.

1. From a selected list of course offerings the pupil will make an appropriate choice of a specific skill in harmony with his interests, ability and personal goals.
2. By participating in the instructional program of his chosen field, the pupil will acquire vocational skills sufficient to qualify him for entry into the world of work on at least a minimum level of productivity.
3. The pupil will develop an improved self-image by discovering his talents through his own insights and with the help of teachers and counselors.
4. The pupil will realize the limitations of his capabilities as a result of actual exposure to levels of skills required in given areas, and will adapt his goals accordingly.
5. Through actual or simulated contacts with customers and clients, the pupil recognizes the need for improving personal characteristics and communication skills in order to succeed on the job.
6. Upon successful completion of training in the Special Needs Program the pupil, with the aid of placement and follow-up service, will obtain and hold a paid job in the skill area for which he was trained.

## PSYCHOLOGICAL GUIDELINES

"Know the child" is a basic principle of teaching applicable in every learning situation, yet, regrettably, often ignored. As evaluations strongly suggest, attention to the personal needs of the Special Needs Program student is absolutely essential. Since most of the students in the program are in the mentally handicapped category, priority has been given first to inservice education of the teachers in the psychology of mental retardation. The following information was prepared for and discussed with Special Needs Program teachers to increase their awareness, understanding and effectiveness.

### Changing Concepts

Educational views and practices regarding mental retardation have evolved through more or less distinguishable stages.

Relief philosophy - relieve stress on teacher and pupils by removal to special classes.

Happiness philosophy - would not have to complete and suffer unnecessary frustration.

Salvage philosophy - teaching academic skills at watered-down level generally still beyond child's level.

Handiwork philosophy - stress on manual activities. The implication was that the retarded could not learn from books but could learn to do things with their hands.

Modern philosophy - emphasizes the worthwhileness of the individual, assumes that the person can become a contributing member of society, accepts the essential dignity of the human being but recognizes that he may lack certain skills or talents.

The current concept of mental retardation is that of a symptom rather than a disease, a symptom described by current level of functioning. The process of rehabilitation is not unlike that of physical rehabilitation; it may not result in a cure but it can greatly improve one's ability to function. Mental retardation was once erroneously viewed as an all-or-none diagnosis, which meant the child was beyond help. The diagnosis does not imply that the retarded person will always be incapable of either average intellectual functioning or unimpaired adaptive behavior. In other words, this condition is not defined as irreversible. Every human has potential for useful activity.

The retardate may be inadequate in such areas as language (cannot express himself or understand), abstract reasoning (concept formation-generalizing), problem-solving, cognitive processes (become aware of or obtains knowledge), motivation and social values. A comprehensive program for mentally handicapped persons must include individualized instruction, training, guidance, counseling, placement, and follow-up.

## Self-Realization

The basic motive of life is the maintenance of one's self. This may be called self-realization or self-actualization and leads to an attitude of self-worth, better known as a self-concept. This self-realization is an attempt by the person to establish and evaluate the worth of himself as a person, including both his contributing and detracting qualities. Self-realization involves evaluation of, and relationships with, that which is true, real and of value. The mentally retarded become anti-social and aggressive when they feel they are being degraded into "things" and are not treated as human beings.

Self-actualization then is no more than maximizing the individual potential. This is different for every individual. Conditions affecting the maximum development of individual abilities include:

Special physical handicaps including such things as gross and/or fine motor coordination, sensory deficiencies, etc.

Subcultural social and economic conditioning of the home (environment)

Emotional withdrawal caused by continued frustration and failure

Because of these factors, expectations may be too low; recognizing these factors leads to the highly individualized program of training and guidance previously mentioned.

An individual who is handicapped either physically or mentally, cannot be expected to form a positive self-concept in an environment which expects him to behave as if he were not handicapped, and then rejects him for failure to meet those expectations.

How do you keep/foster a good self-concept? The use of a structured environment which:

Minimizes failure-avoidance mechanisms and defenses.

Enhances positive attitudes toward an adequate self-concept.

## Social Competence

Social competence is the ability to maintain effective relationships with peers, others, and self. Both inter- and intrapersonal relationships are included. Society has developed an unfortunate attitude toward the retarded.

## Skill Development

Skill development is one aspect of developing competence and worth in the mentally retarded. This must be at both academic and social levels. We must provide appropriate training along the academic lines and along special lines when needed.

What do we mean when we say "along special lines?" We mean learning to attend, persisting at the work-task, avoiding distraction, refraining from distracting others, punctuality, courtesy, cleanliness, reliability, and more flexible behavior.

### Suggestions for Teaching-Learning

Teachers should show consistency in training procedures, have greater tolerance for slowness in development and mastery of the task, overcome the "low expectancy" level leading to a lack of success.

It is evident that the mentally retarded are less retarded in motor learning than in other areas. Motor learning represents a lower-order process that is less affected by intellectual deficiency. The more gross the behavioral components of a task, the less the retardate is disadvantaged. The simpler the task, the less the disadvantage.

Additional training may help to reduce the discrepancy between normals and retardates. Continued practice in motor learning seems to be a substantial benefit. When the retardate fails to learn a certain portion of the task, the teacher should break the task into smaller steps.

Teachers must keep in mind that a relapse is probable under tension and frustration. They should be aware of additional physical and/or emotional limitations; however, it is true that retarded individuals are capable of performing many complex manual and technical operations if given the appropriate training. Retardates "learn to learn" in different ways from others. They often lack "incidental" learning experiences.

### Specific Guidelines

- Prepare individual for new learning situation.
- Motivate effectively.
- Proceed in small steps.
- Use positive reinforcement
- Reinforce by using all sense modalities
- Avoid failure as much as possible
- Reinforce by successive success experiences.
- Provide for ample overlearning.
- Expect relapse.
- Retrain and re-teach whenever necessary.

## READABILITY

Consideration must be given to the readability of the textbook since students who enter the special needs program are limited in reading ability. Readability formulas are not a panacea for reading comprehension problems but are very useful in giving a relative estimate of the difficulty of books. Most readability formulas consider word and sentence lengths as having the greatest predictive power. The reader usually has to make an extra effort in order to identify the full meaning of a long word. Long sentences nearly always have complex grammatical structure. This makes it necessary for the reader to have to remember several parts of each sentence before he can combine them into a meaningful whole.

Even though the readability formula used is based on word and sentence length, the examiner must keep in mind the interests of the reader. Research has found that if the reader is particularly interested in the content, he can read books which are more difficult than when he has limited interest.

Most technical books have a vocabulary peculiar to their own field which tends to increase the reading difficulty. Should the technical words be eliminated, the content would be destroyed. This is the vocabulary which the instructor must remember to teach.

Textbooks designed by publishers to have been written at a particular grade level is no guarantee that the text is at that level. Some books may vary in difficulty as much as four and five grade levels. If the technical books and machine guides appear to be very difficult, it is necessary for the instructors to rewrite the text. The instructor should keep in mind that the shorter the words and the shorter the sentence, the easier the material is to read.

SMOG Grading is a new readability formula that teachers find easy and quick to use. Testing has shown the SMOG formula as valid as the Dale-Chall and Fleisch formulas. However, the SMOG grade is not the reading grade level of the material but is the reading grade level which the reader needs to insure complete comprehension.

In addition to readability formulas, another measuring technique called the "Cloze" procedure may be used for determining readability. This procedure measures comprehension through meaning-pattern relationships. In many ways the "Cloze" text items are identical to those found in reading comprehension tests made by conventional methods. The processes required to fill "Cloze" blanks are probably not different from those required to answer other completion tests. Although every fifth word is deleted in a "Cloze" procedure, the student has 80% of the text on which to base his responses. His responses depend very much on his ability to understand text. This technique is useful in estimating how difficult a specific story will be if read by a particular group of students. The "Cloze" total will not yield a reading grade level but will indicate how a particular group of students will be able to read a particular passage.

Teachers will want to keep in mind that readability is not an easily designed concept. It depends on interaction of a number of factors. Readability depends on both the nature of the materials to be read and the nature of the reader.



## SMOG Grading

1. Count ten consecutive sentences near the beginning of the text to be assessed, ten in the middle and ten near the end. Count as a sentence any string of words ending with a period, question mark or exclamation point.
2. In the thirty selected sentences count every word of three or more syllables. Any string of letters or numerals beginning and ending with a space or punctuation mark should be counted if you can distinguish at least three syllables when you read it aloud in context. If a polysyllabic word is repeated, count each repetition.
3. Estimate the square root of the number of polysyllabic words counted. This is done by taking the square root of the nearest perfect square. For example, if the count is 95, the nearest perfect square is 100, which yields a square root of 10. If the count lies roughly between two perfect squares, choose the lower number. For instance, if the count is 110, take the square root of 100 rather than that of 121.
4. Add three to the approximate square root. This gives the SMOG Grade, which is the reading grade that a person must have reached if he is to understand fully the text assessed.

Book Title \_\_\_\_\_ Date \_\_\_\_\_

Author/Publisher \_\_\_\_\_

Class Using Text \_\_\_\_\_

	SAMPLE		
	Beginning of Text	Middle of Text	End of Text
1. Page number	_____	_____	_____
2. First word of sentence	_____	_____	_____
3. Last word of sentence	_____	_____	_____
4. Number of polysyllabic words	_____	_____	_____
5. Total number of polysyllabic words		_____	
6. Square root of polysyllabic words		_____	
7. Square root _____ + 3 =		_____	
8. SMOG Grade		_____	

## **"CLOZE" PROCEDURE: A Tool for Measuring Readability**

1. Select random passages from materials whose difficulty is being evaluated. A minimum of three samples should be used.
2. Always include the first sentence. Beginning with the second sentence of the paragraph, count one hundred words. Delete every fifth word of the passage and replace it with a line of a standard length. Should the twentieth blank occur in the middle of a sentence, always complete the sentence.
3. Duplicate the passage and give it without a time limit to students who have not read the passage.
4. Ask the students to try to fill in all blanks by guessing from context what the missing word should be.
5. Score responses correct that are in the exact match of words deleted. Disregard the spelling. Total the number of times the original words were correctly replaced in each passage and consider these totals as readability scores.
6. If 7 to 10 blanks are filled in correctly, the materials is suitable for instructional purposes; if 11 or more of the items are answered correctly, the material is suitable for independent work; if less than seven of the items are answered correctly, the material is at frustration level.



## Curriculum Guidelines

Each skill area follows instructional procedures suited to the nature of the skill taught. Several considerations, however, transcend subject lines and apply to all areas:

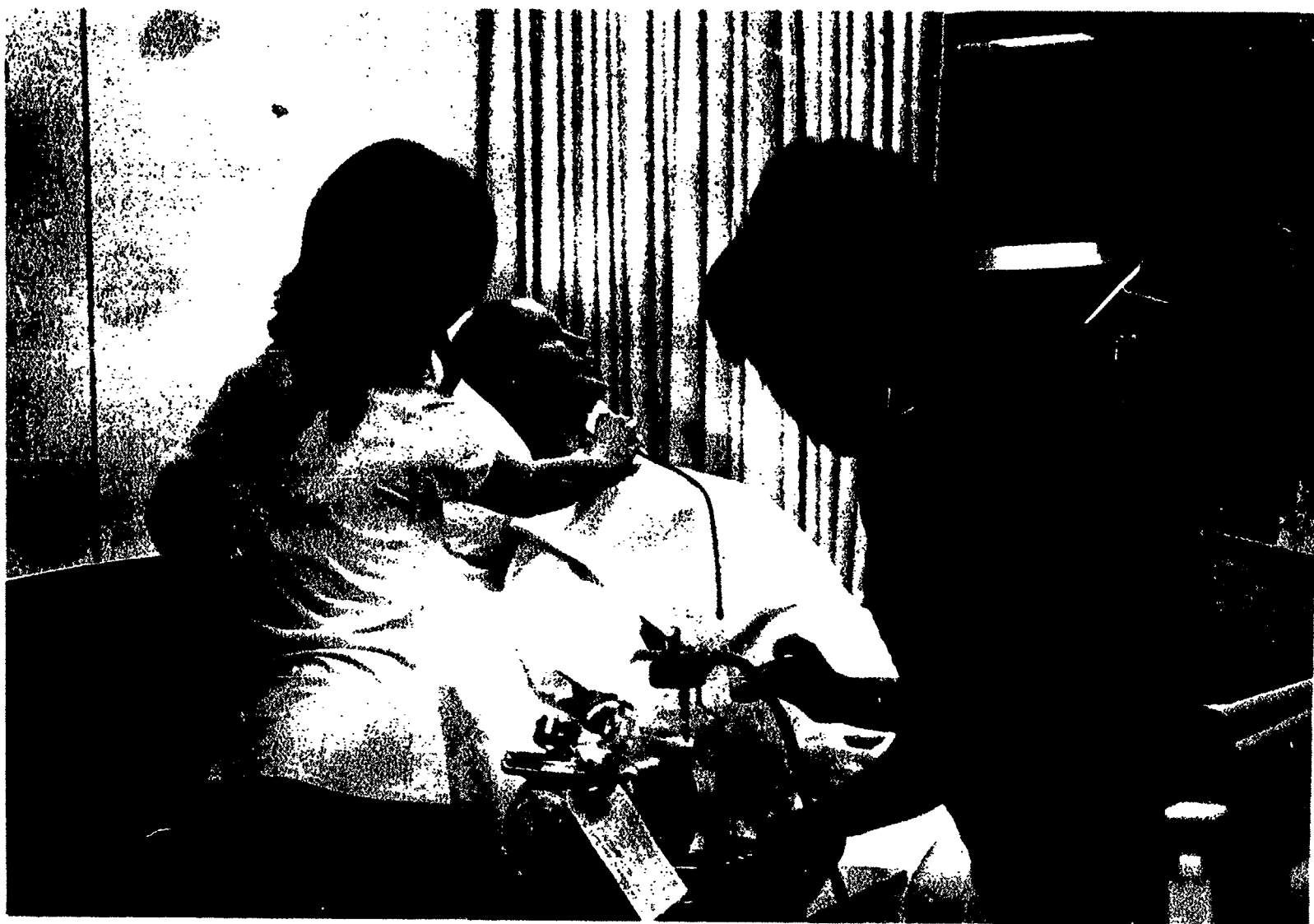
1. Class size is kept deliberately small, ideally between 8 and 14 students per teacher.
2. Instruction and supervision is intensive and constant.
3. Practical "learn by doing" is emphasized; theoretical study is minimized.
4. Positive "you can do it" approach is stressed.
5. Sequence of skills or operations is presented at a slower pace (compared to regular program).
6. Reinforcement by repetition is recommended practice.
7. There is no ceiling on achievement; each pupil may ascend the hierarchy of skills to the limit of his ability.

## Evaluation Procedures

In the Special Needs Program, evaluation of pupil achievement is concerned primarily with individual description rather than competitive rating. It is felt that describing what a pupil can do as a result of his learning experience is far more important than comparing him with his classmates. Tentative forms for descriptive evaluation are attached as appendices. A Job Competence Profile, a part of each curriculum area, is a highly specific individual measurement of achievement.

As a concession to tradition, letter grades will also be given. Teachers have at their disposal the whole range of marks from A to D (no failures). Criteria for arriving at grades is entirely their prerogative.

## HEALTH OCCUPATIONS



### Course Description

The curriculum of the Health Occupations course prepares students in the Special Needs Program for work in a variety of health service areas. Typical job opportunities are:

- |                                |                                                |
|--------------------------------|------------------------------------------------|
| * Hospital Aide                | * Homemaker Aide                               |
| * Nursing Home Aide            | * Funeral Home Aide                            |
| * Diet Kitchen Aide            | * Ambulance Aide                               |
| * Central Hospital Supply Aide | * Laundry Aide                                 |
| * Nursery School Aide          | * Housekeeping Maintenance<br>in Hospital Aide |

The methods of instruction in Health Occupations include (1) lecture, (2) demonstration, (3) use of visual aids, (4) planned on-the-job experience with potential employers. On-the-job experiences are anticipated in nursing homes, nursery school, day care center, general hospital, and clinical practice.

## Performance Objectives

Given 20 weeks of intensive instruction, demonstration and repeat-performance, each student will perform all tasks necessary for the fulfillment of the needs of a child to the satisfaction of the clinical instructor. The student, with or without supervision, will be able to care for needs of well, sick or handicapped children.

Given 10 days of instruction, demonstration and return demonstration, necessary equipment and doctor's order, the student will give a complete bed bath within one hour.

At the end of a 20 week term of instruction, necessary equipment, demonstration by instructor and return practice demonstration by student, the student will do a complete medical asepsis in a clinical unit cleaning situation.

With two months of intensive instruction, a patient, prescribed orders from a physician and necessary equipment, the student will give complete personal care to assigned patient.

A student will be given a clean oral thermometer, a patient and instruction on reading an oral thermometer. The student will be able to take, read and record an oral temperature within two-tenths degrees accuracy. Time involved - 5 minutes for procedures.

Given four weeks of instruction, demonstration and practice on patients, the student will give emergency care to stop bleeding by applying direct pressure to a wound.

## Course Outline

### I. Maintaining Health

- A. Habits that lead to good health
- B. Planning a well-balanced diet
  - 1. Changes in the regular family diet
- C. Feeding the helpless patient
  - 1. Testing the temperature of a hot liquid
  - 2. Measuring the patient's fluid intake
  - 3. Feeding the patient with a spoon
  - 4. Feeding the patient a liquid from a cup
- E. Preventing the spread of infection
  - 1. Discarding sickroom wastes
  - 2. Handwashing
- F. Wearing an apron

### II. Recognizing Illness

- A. Signs and symptoms
- B. Inspecting the throat
- C. Giving the patient a thermometer
- D. Taking pulse and respiration

## II. Recognizing Illness (Cont.)

- E. Reading a thermometer
- F. Cleansing a thermometer
- G. Keeping a daily record
- H. Summary

## III. Body Mechanics

- A. Body posture
- B. Sliding a patient to the side of the bed
- C. Positioning a patient in bed
- D. Helping a patient sit up in bed
- E. Rolling a patient in bed
- F. Preparing a patient to walk
- G. Assisting a patient out of a chair

## IV. Personal Services for the Bed Patient

- A. Giving the bed patient mouth care
- B. Caring for the patient's dentures
- C. Giving the patient a bed bath
- D. Giving the patient a back rub
- E. Giving a bedpan or urinal

## V. Bedmaking

- A. Preventing the spread of infection
- B. Using a drawsheet
- C. Using proper body mechanics
- D. Changing the pillowcase
- E. Making an occupied bed
- F. Placing the top covers

## VI. Medicines and Simple Treatments

- A. Giving medications
- B. Recording medications
- C. Treatments using hot and cold
- D. Major and minor wounds
  - 1. Care of minor wounds
  - 2. Care of major wounds
- E. Treating burns

## VII. Mother's Aide

- A. Introduction of child care
- B. Child growth and development, cleanliness
- C. Handling the small baby
- D. Hazards, emergency and safety measures
- E. Food, recreation, discipline

## VIII. Home-Nursing

## IX. Basic First Aid

- A. Book I
  - 1. Shock, bleeding, breathing, poisoning
- B. Book II
  - 1. Broken bones, burns, rescue
- C. Book III
  - 1. Head injuries, bleeding you cannot see, heart attack, epilepsy, infection and illness, snake bite, animal bites, insect bites
- D. Book IV
  - 1. Too much heat or sun
  - 2. Exposure to cold and frostbite
  - 3. Fire
  - 4. Electric shock
  - 5. Water safety
  - 6. Special safety problems

## X. Family Nursing and Child Care

- A. Nursing and you
- B. Health Control
- C. Disease
- D. The Body at Work
- E. Your Place in the Family
- F. Converting the Home for Illness
- G. Food and Health
- H. Nutrition is Up to You
- I. Treating Specific Illness
- J. Diet for Special Conditions
- K. Therapy
- L. The Patient's Unit
- M. Diagnostic Aids
- N. Comfort and Health Skills
- O. Meeting Emergencies
- P. Treatments and Medication
- Q. Motherhood and Infant Care
- R. The Child
- S. Vocabulary

## XI. Geriatrics or Nursing Home Aide

- A. Nurse aide - Job Summary
  - 1. Performance requirements
  - 2. Physical demands
  - 3. Special demands
  - 4. Qualifications
  - 5. Job knowledge
  - 6. Work environment
  - 7. Vocabulary
  - 8. Nursing care procedures and treatments

## Operational Notes

### 1. Class Characteristics:

Attendance: good  
Attention: short span  
Discipline: no real problem  
Attitude: good

The rate of learning is slow; eventual performance, good. Reading deficiency is a serious handicap, also, word recognition. Fear of not being accepted on the job and in society.

### 2. Use of Teacher Aides:

- a) Assist individual in reading and vocabulary practice in class.
- b) Help in clinical practice activities - laboratory, on chalkboard, homework or daily work.
- c) Duplicate materials
- d) Visual aids, set-ups, posters, bulletin board.

### 3. Following at least 1-2 year of intensive course work, the Special Needs Student will be employable in one of the jobs listed. Success on the job will be enhanced if the same instructor provides follow-up visits on the job, at least monthly, and works with the student until he or she feels adequate in the place of employment.

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Health Occupations

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	Qualified	Not Qualified
<u>Working Environment</u>		
1. Handwashing Technique . . . . .		
2. Care & Clean Utility Room . . . . .		
3. Care & Clean Equipment. . . . .		
4. Care & Clean Soiled Linen . . . . .		
5. Care & Clean Spec. Equipment. . . . .		
<u>Patient Unit</u>		
1. Clean & Arrange Room & Unit . . . . .		
2. Operation of Hospital Bed . . . . .		
3. Bedmaking - Closed. . . . .		
4. Bedmaking - Open. . . . .		
5. Bedmaking - Occupied. . . . .		
<u>Vital Signs</u>		
1. Taking Oral Temperature . . . . .		
2. Taking Rectal Temperature . . . . .		
3. Taking pulse. . . . .		
4. Taking Respiration. . . . .		
5. Siderails . . . . .		
<u>Food Service</u>		
1. Help Serve Trays. . . . .		
2. Help Feed Patient . . . . .		
3. Feed Patient. . . . .		
4. Pass Drinking Water . . . . .		
5. Pass Interval Feedings. . . . .		
<u>Personal Care of Patient</u>		
1. Answering Patient's Call. . . . .		
2. Giving Bedpan-Urinal Removing . . . . .		
3. AM Care of Patient. . . . .		
4. PM Care of Patient. . . . .		
5. Care of Mouth & Teeth . . . . .		
6. Care of Mouth & Dentures. . . . .		



	<u>Qualified</u>	<u>Not Qualified</u>
<u>Personal Care of Patient (continued)</u>		
7. Care of Hands & Nails . . . . .		
8. Care of Feet & Toenails . . . . .		
9. Combing & Brushing Hair . . . . .		
10. Changing Gown - PJ's. . . . .		
11. Wash Patient's Hands & Face . . . . .		
12. Bedbath . . . . .		
13. Backrub . . . . .		
14. Dress Patient . . . . .		

Admission & Discharge

1. Weight of Patient . . . . .		
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Simple Treatments

1. Applying Hot Water Bottle . . . . .		
2. Applying Ice Bag. . . . .		
3. Applying Band-aids . . . . .		
4. Clinitest . . . . .		
5. Acetest . . . . .		
6. Testape . . . . .		
7. Intake & Output Record. . . . .		
8. Hot Applications Compresses . . . . .		
9. Cold Compresses . . . . .		
10. Enema . . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
Nursing Assistance	355.878-034	Nurse Aide . . . . .		
	355.878-038	Orderly. . . . .		
Home Health Aide	354.878-014	Home Attendant . . . . .		
Institutional and Home Management		Mail, Hospital . . . . .		
		Ambulance Attendant		
Medical Emergency	**355.878-010	First-Aide		
	**354.878-010	Attendant. . . . .		
Linen Room Attendant	223.387	Linen-exchange		
		Attendant. . . . .		
Laundry Operator	369.884	Laundry attendant.		
Hospital Guide	355.878	Hospital messenger		
Physical Therapy	355.878	Physical-therapy		
		aid. . . . .		
Food-Service	319.138	Dietary aid. . . . .		

\*\*Helper Only

## LANDSCAPING

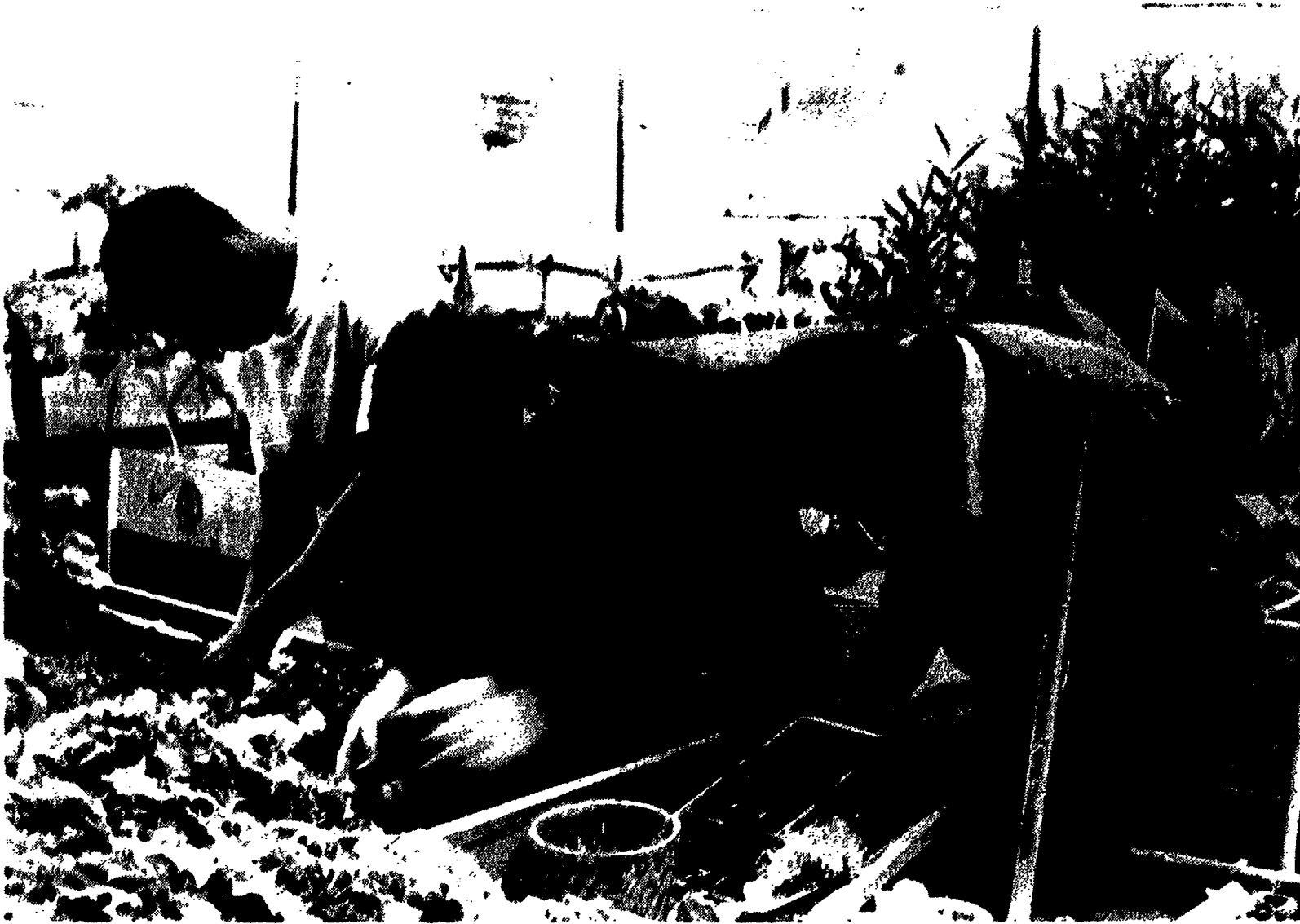


SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM



## FLORICULTURE

## LANDSCAPING



### Course Description

The Special Needs Program in landscaping exposes students to a varied practical experience in the broad area of landscaping. The major training emphases are:

- \* use of greenhouse hand tools
- \* use of lawn power tools
- \* transplanting seedlings, shrubs, trees
- \* planting seeds in flats

The principal training method consists of demonstration by the teacher and/or teacher aides, followed immediately by student involvement in the same operations. Much use is made also of visual materials.

### Performance Objectives

1. The trainee will be able to read the blueprint using the scale indicated and placing each stake within 6" of the specification. He will identify each stake with the technical initials of the plant. A 15,000 sq. ft. residence will be staked in 120 minutes.
2. The trainee will be able to (with the needed tools) prepare the appropriate-sized excavation, prepare the media for soil mix, move the tree undamaged into the excavation, water, wrap with a 1" overlap from the ground to the lowest branch, stake, (outside the ball) on 3 sides sufficiently to support it for 1 year. Time: 45 minutes. The tree will survive!
3. Each student will make five patio steps according to the stages listed:
  - Set up the form
  - Mix 1 cement to 3 gravel thoroughly
  - Add water to a stiff mix
  - Pour into form
  - Tamp concrete into corners
  - Add steel reinforcing rods
  - Straight edge back and forth
  - Allow to set
  - Wood trowel the surface
  - Edge
  - Wood trowel again
  - Edge
  - Steel trowel the surface
  - Edge
  - Steel trowel
  - Wet every 30 minutes
  - Remove in 48 hours
4. The student will accomplish vegetative reproduction of geraniums:
  - The student will select a stock plant, (indicating a healthy green color with at least 6 available cuttings)
  - He will break the terminal end to about 6"
  - Snap off all lower leaves except 2 leaves on top
  - Dip in water
  - Dip in a weak strength indolbuteric acid
  - Cut a straight crease in prepared media
  - Insert the geranium in the crease so the leaves do not touch
  - With a 12", 2 x 4 he will gently press the soil firmly against the stem
  - Turn the misting system on
  - He will do 50 geranium cuttings in an hour
5. The student will sterilize soil by drenching according to the following procedure:
  - Measure 1/4 oz. of dexton
  - Measure 1/8 oz. of terrachlor



Mix in water and stir with rod  
Clean hands with soap and water  
Put liquid in a sprinkling can  
Pour over a leveled wheelbarrow of media  
Repeat mixture for about 3 gallons of liquid  
Pour slowly over media in wheelbarrow  
Clean out can and utensils and put away  
Wash with soap and water  
Place a "Please keep sterile" sign on the sterilized media

6. In a greenhouse, using an insecticide that will control the infestation, the student will:

Identify the insect, using a reference book  
Read the label on several insecticide bottles  
Select the chemical that will control the insect  
Mix the proportion recommended into a container  
Clean out the slide sprayer with clear water  
Insert the suction-end into the container  
Move the pail into the greenhouse area  
Set the sprayer on fine spray  
Commence pumping the sprayer with clear water and hang it up to dry

7. The student will check and adjust all timing clocks:

The student will study the timer  
He will adjust the number of times for it to come on in 12 hour period  
He will adjust it to the bedding plant crop as to how long it will stay on  
He will check, with a watch, the accuracy of the timers at the next timing interval  
He will check the condition of the plants and wetness of soil at the next 24, 48 and 96 hour interval

8. The student will mix the peat, sand, vermiculite and turface, (1/4 each). He will spray 1/4 oz. dexton and 1/8 oz. terrachlor per gallon and wet the media to the bottom of the mix. (He will allow the mix to dry 1 day). He will select, (identify by reading the label), the correct variety and genus of plant. The media will be wet to the touch, 72 holes to the 11 x 22 flat will be dibbled in. The seedling will be undercut and roots loosened up. The plant will then be lifted out by the leaf with help from under. The student will place the plant in the hole and the soil firmed around the plant, then with room temperature water, wet to run off. He will store the plant out of direct sunlight for 24 hours. Upon completion of several flats he will spray all with a liquid fertilizer, to run-off. Each day he will observe the plants and if damping-off is evident he will recommend spraying with a fungicide.

9. In the greenhouse workroom with a washing drum and sufficient sterilizing chemical, the student will:

Hot (125°) water is hosed into the clean drum to about a 24" height by the student.

He mixes 2- 4 oz. containers of chlorine into the water  
He briskly brushes the flats removing all visual refuse  
He dips the flat into a rinse of 1/2 strength  
He drains the flats upside down  
He stores the flats in an area where they will not be recontaminated  
They are marked "STERILE"

10. Five multiple questions will be given about each of the following horticulture occupation areas; Greenhouse Production, Nursery Production, Landscape Activities, Lawn Maintenance and Plant Propagation. The student will be able to select 75% of the correct choices.

11. The student will establish an annual floral bed:

Rake off refuse  
Rototill area  
Rake and level area  
Straight edge surface  
Mark off first row, 1/2 a trowel length from the back edge. Space a trowel length apart from each plant.  
Plant flower at same height in flat cover and water  
Upon completion of the second row, salt and pepper trellon, (herbicide), between each plant and incorporate into the top 1/2 inch of soil.  
Continue this pattern until all rows are in  
When all rows are planted, spray complete area with a fine mist until soil is wet 2 1/2 inches.  
Follow up each day (if possible) with replacements for plants that dried-up

12. The student will plant young bare root stock in lining out beds:

The rows are marked off by the student  
He marks in the soil at 12 inch intervals with a trowel  
Digs each hole larger than the root system of the bare root stock  
He places peat around the root system and covers the plant roots  
He forms the soil leaving a saucer around the plant. He waters the plant, then continues. He plants the 100 plants in 60 min.

13. The trainee will proceed to measure the calibre then measure the potential ball; cut into the soil at an angle starting at the top and sides of the ball. The assistant removes the loose soil with the shovel as the trainee continues cutting and shaping the ball until it is undercut. He moves the burlap under, breaks the ball at the bottom, pulls the burlap up tight and ties the opposite corners and pins tightly with nails. Then the trainee will tie the ball with heavy twine in such a way to insure the portability of the ball to the place of planting.

14. With a tractor plus a cultivator in the school nursery, the student will:

Check oil level  
Check gas tank  
Tighten up all cultivator teeth  
Start the tractor  
Lower the cultivator as he drives between the rows, stay 10 to 12 inches away from each tree  
Clean cultivator between all rows

15. With the appropriate tools, the student will:

Eyeball the lawn area after it has been finished by a machine  
Level off the top, filling in low spots, smoothing down the high spots, and removing rocks and stones.  
Cover the lawn area with a balanced fertilizer about 2 lbs. per 1000 sq. ft.  
Re-rake the area  
Plant the seed, (putting 1/3 of the seed in the cyclone seeder,) and travel back and forth across the lawn just feathering into each pattern.  
Place 1/3 of the seed into the hopper, (#3) and go perpendicular to the first crossing  
With the remaining 1/3 go diagonally over the seed bed.  
Cover the seed by raking lightly  
Place 1 bale of straw per thousand sq. feet  
Suggest to the owner a watering schedule considering the weather and soil.

Kentucky Blue Grass

#10 needed

#3 on each coverage

16. With a thatcher and a sweeper and refuse bags, a team of two students will:

Check oil and gas level of thatcher  
Adjust thatcher to type of sod  
Consider an efficient pattern to follow  
Start machine with cutters elevated  
Regulate speed correctly  
Proceed to thatch, lapping 2".  
Aide will follow (after 5 rounds of thatcher), with a power  
Aide will thatch in refuse bags  
Equipment will be loaded into trailer

17. On a residence lawn area with leveled 300 yds. of sod, (or sufficient amt.) 2 wheel barrows, 3 aides, binder twine (100 ft.) 4 stakes, 2 balling spades, 2 rakes, and a roller, the student will:

Hand rake the lawn area keeping just ahead of the sod carrier  
Carry sod and lay the roll so as to unfold in the immediate area  
Open the roll along a straight edge (driveway)  
Grasp the open yd. of sod and move tightly against straight edge  
Continue opening each roll and lift the laid end and the new end up and tuck tightly together  
Stake and run binder twine along property line



Cut the sod along this line  
Clean up all waste pieces  
Roll sod  
Water complete area  
Pick up tools and equipment and place in trailer

18. With a large tractor and landscape rake, the student will level a 5,000 sq. ft. area for hand raking prior to seeding:

The student will have prepared the tractor by checking all cautions.  
He will hook up the landscape rake to 3 point hitch.  
He will place the tractor in low range, 2nd gear.  
He will level the area up and down, regulating the hydraulic lift as necessary.  
He will level the area across the area  
He will dismount often and check the levelness  
The crew will follow with hand rakes to prepare for seeding.

19. The student will fertilize a 10,000 sq. foot lawn with a 5-1-1 ratio chemical in 30 minutes using a 25-5-5-1 mix.

Grease up the cyclone spreader  
Wipe it out  
Put 1/3 (17#) of the 50# bag into the spreader  
Set up a continuous pattern for spreading  
Beginning on a drive or walk turn spreader on  
Watch the feathering-it should be just a few inches  
Shut off on the turns  
Cover the complete area with 17 pounds  
Cover the other direction, (going perpendicular) with the other 17 pounds  
Refill the machine on the drive area  
Drag a hose over the lawn area with an aide assisting

20. The student will simulate with the teacher an interview for a job:

The student will introduce himself  
He will give his age  
He will explain his enrollment in landscape horticulture at the Skill Center  
He will list 5 competencies within this, (job) occupation area  
He will be considered for employment

#### Course Outline

A. Introduction: What is Landscaping

B. Turf-Grass Industry

Sod farms  
Sodding lawns  
Establishing a lawn  
Renovating a lawn  
Lawn maintenance  
Machinery safety  
Machine care and operation

Chemicals for the lawn  
Fertilizers  
Insecticides  
Herbicides  
Fungicides  
The golf course business

C. Greenhouse Maintenance

Keeping plants watered  
Keeping benches weeded  
Cleaning floors  
Pruning plants  
Care of greenhouse garden  
Fertilizing plants  
Controlling insects safely  
Controlling fungus safely  
How to set misting systems  
How to set temperature  
Mixing soils  
Sterilizing soils, tools and benches  
Identifying common plants

D. Grounds Maintenance

Purpose of different plants  
Pruning in the summer  
Pruning in the dormant season  
Edging beds and lawns  
Planting floral beds  
Weeding/watering/fertilizing floral beds  
Identifying weeds  
Identifying bedding plants  
Preparing perennial beds  
Planting perennials  
Preparing perennials for winter

E. Plant Propagation

Taking cuttings  
Preparing cutting beds  
Using hormones  
Inserting cuttings  
Care of cuttings  
Checking cuttings  
Transplanting cuttings  
Care of plants  
Seeding plants  
Care of seeded flats  
Transplanting seedlings  
Care of transplants  
Selling bedding plants

## F. Concrete in the Landscape

- Why different mixes
- Purpose of each ingredient
- How to mix
- Adding water
- Making portable forms
- Curing concrete
- Opening forms
- Setting of concrete steps

## G. Nursery Maintenance

- Preparing the ground
- Marking rows for trees
- Digging holes/planting trees
- Using chemicals for weed control
- Using tools for weed control
- Watering plants
- Pruning trees in the nursery

## H. Labor Relations when Working

- How to look for a job
- Approaching a new job
- Questions to ask about the job
- Clothes to wear
- Working with customers
- Keeping track of hours
- Keeping track of duties
- Who will help once working
- Getting along with fellow workers

## I. Landscape Practices

- The 3 acres of the landscape
- A few things to understand about each area
- Planting trees/shrubs in landscape
- Using mulches

### Operational Notes

#### 1. Class characteristics:

- Attendance: very good
- Attention: exceptional
- Discipline: excellent
- Attitude: above average

#### 2. Use of Teacher Aides:

- a) give demonstration in most operations
- b) provide guidance (supervision)
- c) act as on-the-job foreman (on-campus operations)
- d) keep track of tools

**3. Major adaptations of the "regular" curriculum for Special Needs students include:**

- \* less stress on identification of plants and crops**
- \* more stress on general duties of care and clean-up**
- \* no scheduling of contract jobs**
- \* need for additional amounts of basic materials; e.g., soil, seeds, flats, shovels, greenhouse space**

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Landscaping

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
                     Last                                      First                                      Middle

Address \_\_\_\_\_  
                     Street                                      City                                      State                                      Zip Code

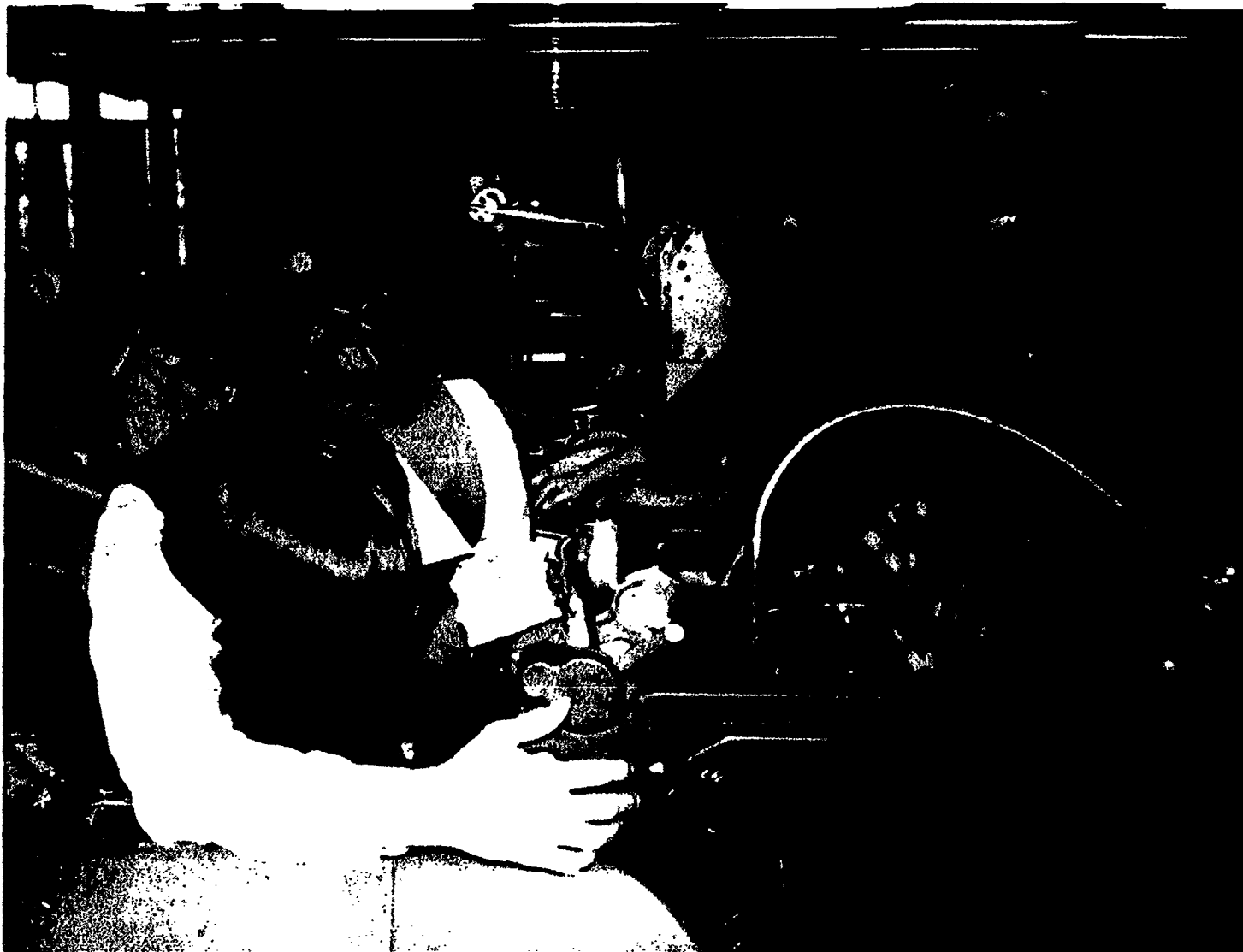
Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Greenhouse activities</u>		
1. Sterilize soil . . . . .		
2. Prepare bench soil - fertilize . . . . .		
3. Sterilize flats - pots . . . . .		
4. Plant Seeds - Bench - Flat . . . . .		
5. Transplant seedlings . . . . .		
6. Apply chemicals to control pests . . . . .		
7. Propagate Vegetatively . . . . .		
<u>Nursery activities</u>		
1. Prepare - Mark planting bed. . . . .		
2. Plant, tie, stake young stock. . . . .		
3. Operate tractors and Equipment . . . . .		
4. Control (weeds, diseases, insects) . . . . .		
5. Ball and burlap plants . . . . .		
6. Operate gasoline engines . . . . .		
<u>Landscaping activities</u>		
1. Read blueprint and position plants . . . . .		
2. Plant, stake and tie trees & shrubs. . . . .		
3. Construct structures . . . . .		
4. Water, spruce, plant, fertilize plants in the landscape. . . . .		
<u>Lawn activities</u>		
1. Prepare soil and plant seeds . . . . .		
2. Power rake and aerate. . . . .		
3. Fertilize, water, control weeds. . . . .		
4. Power mowing . . . . .		
<u>Career Opportunities</u>		
1. Know competencies. . . . .		
2. Apply for a job. . . . .		
3. Interviewing . . . . .		
4. Personal traits. . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
Arboriculture	407.138-014	Tree-Trimming . . . . .		
	409.884-014	Tree Surgeon helper . .		
Greenhouse	01.0503	Greenhouse operation. .		
Landscaping	407.181-010	Landscape gardener. . .		
	407.884-010	Grounds Keeper. . . . .		
Nursery	406.168-010	Nurseryman. . . . .		
	406.887-022	Groundman . . . . .		
	406.887-030	Nursery Helper. . . . .		
	406.887-010	Bagger-and-Burlap Man .		
Turf	407.137-010	Greenskeeper. . . . .		

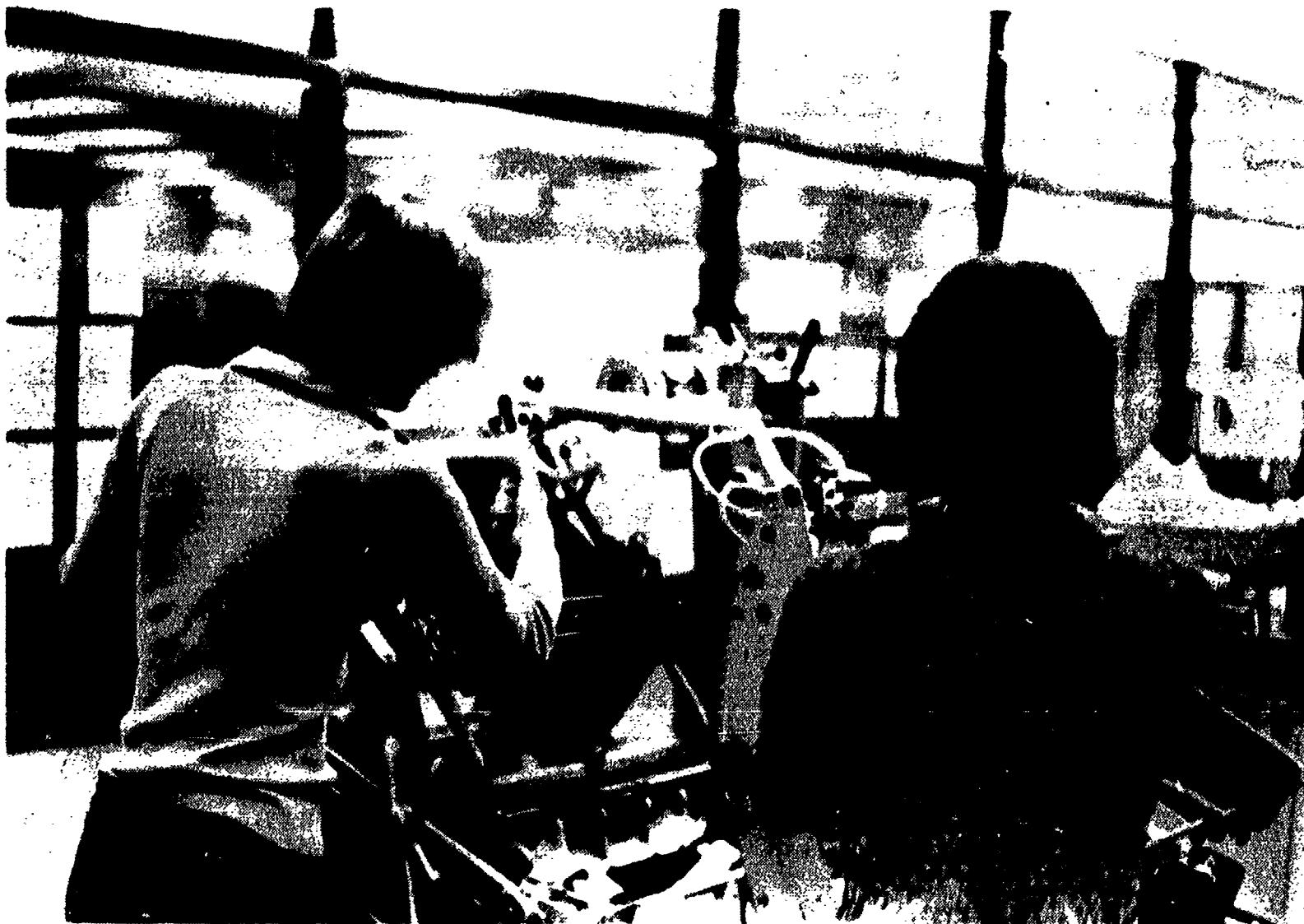
## GRAPHIC ARTS



SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM



## GRAPHIC ARTS



### Course Description

The varied tasks involved in a graphic arts shop provide the opportunity for a "job" approach to training. The main objective for the Special Needs student is to achieve a working knowledge of one or more of the following jobs:

- |                              |               |
|------------------------------|---------------|
| * Hot Composition            | * Photography |
| * Cold Composition-Headliner | * Platemaking |
| * Letter Press               | * Stripping   |
| * Offset Duplicator          | * Bindery     |

Two basic techniques characterize the teaching-learning process:

1. The students are engaged in actual production work, not contrived exercises.
2. Students are grouped in such a manner that those untrained in a specific operation may learn from others who already know the job . . . a modified apprentice approach.

## Performance Objectives

1. Establish safety practice will be followed at all times in the Graphic Arts laboratory so that the student will not cause injury to himself or others.
2. The student will develop efficient class routine as shown by:
  - \* Being on time for every class
  - \* Keeping assigned area clean
  - \* Courtesy to other persons in the lab
3. The student will be able to list at the end of the first year the five most prevalent printing processes.
4. Each student will be able to set three 18 pica lines of type in the composing stick without errors.
5. Each student must know the layout of the California Lab Case and pass a written test with not more than three errors.
6. The student is able to set type on the headliner with no errors.
7. The student will be able to lock up a chase for the platen press so the type will not fall.
8. The student is able to set up and use a platen press without errors.
9. The student will be able to do continuous tone photography by exposing film on a camera, develop and print black and white pictures for his own album.
10. The student will be able to shoot enlargements and reductions of continuous tone copy as halftones with a 10% dot in the shadow area and a 90% dot on the high light area with reproduction ability on smooth white paper.
11. The student will be able to shoot enlargements and reductions of line copy without pinholes, choked or spread.
12. The student is able to burn a photo sensitive paper, metal, and plastic plate with a strong image.
13. The student will be able to adhere a negative, cut windows, and opaque a flat so that he can burn a plate.
14. The student will be able to run an offset duplicator copy on bond paper in one color that is centered, clear and legible.
15. The student will be able to perform folding, collating, and stapling with fewer than 4% spoilage.

## Course Outline

- A. Introduction
- B. Orientation
- C. Layout and Design
- D. Composition
  - a. Hand set type
  - b. Headliner
- E. Letterpress
- F. Photography
  - a. Continuous tone
  - b. Line
  - c. Half tone
- G. Stripping a flat
- H. Platemaking
- I. Offset Duplicator 1 and 2 color
- J. Bindery Technology

## Operational Notes

### 1. Class characteristics:

Attendance: above average  
Attention: average  
Discipline: good, after teacher aides were provided  
Attitude: good

- 2. The Special Needs Program differs from the "regular" program in two respects: (a) more supervision is required, (b) there is a greater spoilage factor. The curriculum followed is essentially the same in both programs. The achievement and performance of the Special Needs student is good in relation to time spent in training.
- 3. Special instruction aids need to be developed: e.g., books with descriptions in large type and pictures showing each step of each operation.
- 4. With the use of student aides, discipline problems were minimized and work stoppage was reduced.

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Graphic Arts

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	Qualified	Not Qualified
<u>Job Planning and Layout</u>		
1. Comprehensive layout . . . . .		
2. Setting display. . . . .		
3. Type arrangements. . . . .		
4. Choosing a type face . . . . .		
5. Proofing copy. . . . .		
<u>Composition (hot metal type)</u>		
1. Measuring type . . . . .		
2. Working with a type case . . . . .		
3. Setting the composing stick. . . . .		
4. Centering the line . . . . .		
5. Spacing the composition. . . . .		
6. Dumping the stick. . . . .		
7. Work at the bank . . . . .		
8. Tying up a type form. . . . .		
9. Taking proofs. . . . .		
10. Using proof press with grippers. . . . .		
11. Washing the form and press . . . . .		
12. Untying a form and distributing type. . . . .		
<u>Lock-Up</u>		
1. Positioning a form for lock-up . . . . .		
2. Positioning the furniture. . . . .		
<u>Presswork (letterpress)</u>		
1. Putting on the packing . . . . .		
2. Inking up a platen press . . . . .		
3. Putting a chase in the press . . . . .		
4. Positioning the guides . . . . .		
5. Marking out a type form. . . . .		
<u>Composition (cold)</u>		
1. Doing photographic display composition . . . . .		
2. Doing headline composition . . . . .		
<u>Paste Up</u>		
1. Using the waxer. . . . .		
2. Correcting copy on light table . . . . .		
<u>Photography (continuous tone)</u>		
1. Using a hand held camera . . . . .		
2. Developing film. . . . .		
3. Using an enlarger. . . . .		
4. Using a contact printer. . . . .		

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Photography (line)</u>		
1. Using the process camera . . . . .		
2. Using the exposure guide . . . . .		
3. Doing enlargements and reductions. . . . .		
4. Shooting line copy . . . . .		
5. Making negatives . . . . .		
<u>Photography (Halftone)</u>		
1. Using the exposure computer. . . . .		
2. Developing halftone negative . . . . .		
<u>Stripping the Flat</u>		
1. Using the goldenrod paper. . . . .		
2. Fastening the negative to goldenrod paper. . . . .		
3. Cutting windows. . . . .		
4. Opaquing negatives . . . . .		
<u>Platemaking</u>		
1. Working with metal plates. . . . .		
2. Working with paper plates. . . . .		
3. Working with chemicals . . . . .		
4. Using the plate burner . . . . .		
5. Using the wash table and the rub table . . . . .		
<u>Offset Presswork</u>		
1. Preparing press for operation. . . . .		
2. Setting and adjusting basic systems. . . . .		
3. Keeping presses running for production . . . . .		
4. Cleaning press . . . . .		
<u>Bindery</u>		
1. Using the padding press. . . . .		
2. Using the plastic binding unit . . . . .		
3. Using the stitcher . . . . .		
4. Using the stapler. . . . .		
5. Using the paper drill. . . . .		
6. Using the paper folder . . . . .		
7. Doing trimming . . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
Composition, Makeup, and Typesetting		Printing		
	973.381-014	Compositor Apprentice .		
	973.381-030	Job-Printer Apprentice. . . . .		
Printing Press Occupations				
	651.782-038	Offset-Duplicating- Machine Operator. . . .		
	651.782-046	Offset-Press-Man Apprentice. . . . .		
	651.782-058	Platen-Press-Man Apprentice. . . . .		
	651.886-018	Press-Man Helper. . . .		
Lithography, Photography, and Platemaking				
	972.382-014	Photolithographer Apprentice. . . . .		
	976.887-018	Photographer Helper . .		

## PLANT MAINTENANCE



### Course Description

The Special Needs program in Plant Maintenance is an on-the-job experience with the custodial staff of the Skill Center. General responsibility for and supervision of the course remains with the director and special staff persons in charge of the Special Needs Program.



### Performance Objectives

Unit: Maintenance of equipment      Specific Skill: How to adjust a drinking fountain.

Conditions of performance: The student, given 6 hours of instruction, will learn how to adjust a drinking fountain using a wrench, pliers, and screwdriver.

Level of performance: With 100% accuracy, the student will demonstrate how to adjust a drinking fountain.

Written objective: Through instruction and demonstration, the student will adjust a drinking fountain using the proper tools.

Unit: General Housekeeping      Specific Skill: How to remove gum from floor.

Conditions of performance: Given 1 hour of instruction the student will learn how to remove gum from the floor with a putty knife.

Level of performance: With 100% accuracy the student will demonstrate the proper way to remove gum from the floor with a putty knife.

Written objective: Through instruction and demonstration the student will remove gum from the floor with a putty knife.

Unit: General Housekeeping      Specific Skill: How to operate hand vacuum cleaner.

Conditions of performance: Given 4 hours of instruction, the student will learn how to turn off and on a hand vacuum cleaner and to install attachments.

Level of performance: With 100% accuracy, the student will demonstrate correctly how to operate the hand vacuum cleaner and attachments.

Written objective: Through instruction and demonstration the student will correctly operate the hand vacuum cleaner and attachments.

Unit: Floor Care      Specific Skill: Select the proper sealer for a concrete floor.

Conditions of performance: In 6 hours of instruction, the student will be shown the type of sealer and how to apply it to the concrete floor.

Level of performance: With 100% accuracy, the student will demonstrate by applying the proper sealer to the floor.

Written objective: With instruction and through demonstration, the student will correctly apply the proper sealer to the concrete floor.

Unit:

Specific Skill: Replace burned out electric lamp.

Conditions of performance: The student, given 1 hour of instruction, will be shown how to properly remove the old lamp and install the new electric lamp.

Level of performance: Through proper instruction and demonstration, the student will replace the burned out electric lamp.

Unit: Security

Specific Skill: Locking doors in the building.

Conditions of performance: With 8 hours of instruction the student will be shown how to secure and lock each type of door in the building.

Level of performance: The student will, with 100% accuracy, demonstrate by locking all the doors.

Written objective: With instruction and through demonstration the student will lock all the doors in the building.

Unit: Safety

Specific Skill: How to use a carbon dioxide fire extinguisher.

Conditions of performance: The student, given 10 hours of instruction will learn how to carry, discharge, and refill a carbon dioxide fire extinguisher.

Level of performance: With 100% accuracy, the student will demonstrate the proper use of a carbon dioxide fire extinguisher.

Written objective: Through instruction and demonstration the student will learn how to properly care for and use a carbon dioxide fire extinguisher.

### Course Outline

The size of the building to be serviced will determine the specific duties performed by the custodial staff. In small buildings practically all the work is performed by the custodian himself. The larger the building, the more assistance will be needed and the work assignments will become more specialized. In general the work performed will include the following:

1. Keep public parts of building in clean, orderly condition and good state of repair.
2. Operate furnaces and boilers to provide heat and hot water.
3. Sweep, mop, and scrub halls, stairways, rooms and offices.
4. Remove and dispose of litter and waste paper from halls, stairways, rooms and offices.
5. Make minor repairs to defective plumbing, electric wiring, or other parts of the building.
6. Replace burned out electric lamps in fixtures throughout the building.
7. Clean sidewalks and driveways of snow and debris.

8. Issue instructions to subordinates concerning cleaning, repair, and maintenance of mechanical and electrical equipment, plumbing and structure of building.
9. Maintain adequate safety protection for occupants of building by directing elimination of fire or other hazards, providing necessary fire-extinguishing equipment and insuring accessibility to fire escapes.
10. Keep records of labor and material costs for operating building.
  1. General housekeeping
  2. Sanitation in the general overall work area
  3. Operation and maintenance of heating-ventilating systems
  4. Maintenance of buildings and grounds
  5. Human relations
  6. Management of supplies and equipment
  7. Safety
  8. Students will learn about the importance of personnel
  9. Security and protective measures

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Plant Maintenance

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
                     Last                                      First                                      Middle

Address \_\_\_\_\_  
                     Street                                      City                                      State                                      Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Assistant Custodian</u>		
A. General Housekeeping . . . . .		
1. Sweeping . . . . .		
2. Dusting . . . . .		
3. Cleaning Materials . . . . .		
4. Cleaning . . . . .		
5. Floor Maintenance . . . . .		
6. Repairs - Adjustments . . . . .		
B. Safety		
1. Fire Extinguishers . . . . .		
2. Emergencies - Hazards . . . . .		
C. Maintenance of Building and Grounds		
1. Flag Etiquette . . . . .		
D. Human Relations		
1. Schedules - Responsibilities . . . . .		
2. Leadership . . . . .		
E. Security and Protection Measures . . . . .		
F. Handling of Supplies and Equipment . . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
Custodial	382.884	Janitor		

## WELDING



SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM

## WELDING



### Course Description

The curriculum in welding for the Special Needs pupils provides practice in arc and gas welding, silver soldering, bronze welding, and cast iron welding. Ability permitting, boys may progress from learning the basic techniques to the problems of application of skills to real situations. Instruction in each phase involves total group lectures and demonstrations, individual trials repeated as often as necessary, one-to-one teacher-pupil performance sessions. Related theoretical information is largely omitted.



## Performance Objectives

Given 2 hours of instruction and laboratory time, covering the correct procedures of lighting the torch, each student will demonstrate the correct procedure with 100% accuracy.

Given 200 hours of instruction and laboratory time, covering the 12 different types of welds, each student will determine the equipment necessary to complete the assigned welds and will proceed to accomplish them with 100% passage of a strength-stress test.

Given 250 hours of instruction and laboratory time, covering the 12 different types of welds, the students will determine the equipment necessary to complete the assigned welds and will proceed to accomplish them with 100% passage of a strength-stress test.

Each student will distinguish between oxygen cylinder, helium cylinder, and acetylene cylinder, within the storage or classroom area, after one 2-hour lecture and demonstration on this subject by the instructor.

Given 280 hours of instruction and laboratory time, covering the 12 different types of welds, the student will determine the equipment necessary to complete the assigned welds and will proceed to accomplish these with 100% accuracy of a strength-stress test.

In the given time of instruction and lab covering the 11 welds, the student will determine the equipment necessary to complete the assigned welds with 100% accuracy of a strength-stress test.

Given 12 hours of instruction and laboratory time, covering 4 different cutting procedures, the student will assemble the necessary equipment to complete the four assigned cutting procedures. With this equipment the student will completely cut the metal into two pieces.

## Course Outline

### I. Introduction

#### A. The Genesee Area Skill Center

1. Purpose
2. Skills offered
3. Staff
4. Tour of the center

#### B. Welding class

1. Teacher
2. Students
  - a) Previous experience

## Course Outline (Cont.)

- b) Desire
- c) Future plans
- 3. Discussion of how welding relates to vocational demands

## II. Course

- A. Describe and demonstrate various welding methods and techniques
  - 1. Gas fusion welding (Demonstration: lap joint test plate)
  - 2. Gas bronze welding (Demonstration: butt joint test plate)
  - 3. Electric arc welding (Demonstration: 3 beads on a test plate)
  - 4. Metallic inert gas welding (Demonstration: run a few stringer beads)
  - 5. Tungsten inert gas welding
- B. Past experience
  - 1. Give those students who have had some past experience a chance to try their skill.
  - 2. Ask those who will to describe the welding machine or how it is used.
  - 3. Encourage those who can to select the different types of welds from a stack of welded pieces.
  - 4. Inquire if other members of their family are welders
- C. Responsibility and Safety
  - 1. Only leather top shoes may be worn in class
  - 2. After roll is taken and until cleanup is finished, safety glasses must be worn
  - 3. There is to be no hitting, bumping, running or playing at any time while student is in building; injury may result
  - 4. No one is to cry out "fire" when there is none
  - 5. All injuries must be reported to the teacher promptly
  - 6. In case of fire or storm, follow the directions posted for leaving the building
  - 7. Be sure to cover all exposed skin areas before arc welding
  - 8. Do not look at arc welding from less than 50 feet
  - 9. Be sure to wear shaded glasses for gas welding
  - 10. Nothing may be thrown in the welding area
  - 11. Be mindful that all welds are hot. Be sure what you have just welded is marked hot or covered or put in a safe place to cool
  - 12. The emergency buttons are to be used for emergency only
  - 13. Observe safe practices for each machine as directed by the teacher

## Course Outline (Cont.)

### D. Class Rules and Responsibilities

1. Breaks are to be 7 minutes long and the person on break must have a pass during the break. Food may be purchased
2. There will be a lab job assigned to each student
3. It is the responsibility of each student to clean his own area
4. No fooling around or lying around is allowed
5. No student is to take on an outside job without first consulting with the teacher
6. No materials in the lab are to be used without the teacher's consent

### E. Machines

1. Types of machines
2. Proper ways for using them
3. Wrong ways

### F. Materials

1. Welding gas metal bins
2. Arc welding metal
3. Electrodes selection
4. Gas Rod and fluxes

### G. Gas fusion welding

1. Classroom
  - a) Study and discussion of textbook
  - b) Overhead transparency projection or oxy-acetylene setup components
  - c) Film strip describing setup and lighting of an oxy-acetylene setup torch
2. Lab work
  - a) Lighting and setup of demonstration by the teacher
  - b) Each student performs a setup and lighting function
  - c) Other students watch to see that it is done correctly
  - d) Completion of practice plates for all positions
  - e) Demonstrations for the various welding plates as students are ready - both group and individual

### H. Arc Welding A.C.

1. Classroom
  - a) Study and discussion of textbook material on arc welding
  - b) Overhead projections and discussion of machines and circuit of arc welding
  - c) Film strip on machines and safety in arc welding
2. Lab work
  - a) Demonstration
  - b) Each student attempts his first weld in a group

## Course Outline (Cont.)

- c) A booth is assigned to each student. Each student is shown how to get his welder. A demonstration is done for the student in his booth.
- d) The teacher watches while a few welds are done by each student in his booth
- e) The teacher from this point gives personalized instruction

### I. Student work

- 1. Each student must complete a selected amount of welds in various positions and with various electrodes
- 2. Practical tests are to be completed at various times
- 3. When the assigned work is done, student may work on special projects and do some creative project work
- 4. Each student is encouraged at times to watch another student weld for the purpose of observing proper and incorrect welding skills.

### Operational Notes

#### 1. Class characteristics:

Attendance: very good  
Attention: good; lags if fatigued  
Discipline: no problem; deteriorates a bit in hot weather  
Attitude: very good

- 2. Pupils often wish to attain perfection and tend to remain with one skill or operation beyond the necessary point of proficiency.
- 3. Work planning is a noticeable deficiency.
- 4. Actual basic skills acquired can be as good as that of a regular student.
- 5. To adapt the regular curriculum to effectively teach the Special Needs class, the following provisions are desirable:

Special tools for the physically-handicapped  
Films and colorful printed materials  
Posters  
Handouts: single-concept sheets, safety reminders  
Occasional diversions to break straight routine.  
Simplified directions

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Welding

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

Oxy-Acetylene Welding

1. Setting up apparatus, precautions, safety practices and operations of hand cutting torches. . . . .
2. Flat plate cutting and beveling . . . . .
3. Flat Plate Welding
  - a. Puddling flat bead without use of filler rod
  - b. Corner to corner V. Flat position. . . . .
  - c. V. Butt flat without use of filler rod . . . . .
  - d. V. Butt flat with filler rod . . . . .
  - e. V. Butt semi-vertical. . . . .
  - f. V. Butt horizontal . . . . .
  - g. Flat fillet. . . . .
  - h. V. Butt vertical . . . . .
  - i. Vertical fillet. . . . .

Qualified Not Qualified

Arc Welding

1. Principles of the arc welder. . . . .
2. Flat plate welding and cutting. . . . .
  - a. Striking and running flat beads. . . . .
  - b. Running continuous bead. . . . .
  - c. Weaving. . . . .
  - d. Padding. . . . .
  - e. Lap welding. . . . .
  - f. Tee or fillet weld . . . . .
  - g. V. Butt weld . . . . .
  - h. Fillet (vertical position) . . . . .
  - i. Fillet (flat position) . . . . .
  - j. Fillet (overhead position) . . . . .
  - k. V. Butt (vertical position). . . . .
  - l. V. Butt (flat position). . . . .
  - m. V. Butt (horizontal position). . . . .

<u>Welding Special Metals</u>	<u>Qualified</u>	<u>Not Qualified</u>
1. Aluminum. . . . .		
2. Stainless Steel . . . . .		
3. Cast Iron . . . . .		
4. Carbon Arc. . . . .		
5. Hard Surfacing. . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
Gas Welding	816.884-014	Flame Cutter, hand. .		
Electric Welding	810.782-014	Welder, Butt. . . . .		
	810.884-018	Welder, Arc . . . . .		
Combination Welding				
	812.884-010	Welder apprentice . .		
	812.884-014	Welder, Combination .		
	812.884-018	Welder, production- line. . . . .		
Brazing and Soldering				
	814.884-014	Brazer, repair & salvage . . . . .		
	814.884-018	Brazer - assemble:. .		



## DRIVER EDUCATION



### Course Description

The driver education course is designed to serve those students in the Special Needs Program who have experienced failure in other driver education classes. Case studies show that these students have failed the regular driver training course because of reading and cognitive limitations. The difficulties show up especially in the classroom segment of training. The driver education course at the Skill Center, therefore, relies heavily upon especially adapted materials written in programmed style.

## Performance Objectives

- I. Students will develop sufficient knowledge to pass the Michigan Driver License exam.
- II. Students will demonstrate behind the wheel skills in the following driving environments:
  - A. Open highway
  - B. Expressway
  - C. Parking
  - D. City intersections
  - E. Business traffic situations and residential areas

## Course Outline

### I. Lesson Sheets

- A. Rewritten in Dolch words from segments of What Every Driver Should Know.
- B. Number clues used in booklet corresponding to rewritten sections of lesson sheets.
- C. Answers to practice sheets for practice sheets attached.

### II. Practice Sheets

- A. Four forms of 25 questions.
- B. Number clues on sheet one questions follow order of lesson sheets.
- C. Sheet two like one but with clues removed.
- D. Sheet three, questions in random order with clues in.
- E. Sheet four identical to three with clues removed.
- F. Students cycle through forms until average success rate is 90-100% correct.

### III. Quizzes

- A. Quizzes written on same format as questions on Driver's License exam.
- B. Quizzes read to students since driver exam can be read to students.
- C. Production on quizzes determine when it is good to move ahead to next lesson segment.

### IV. Enrichment Materials

- A. Ford films used for oral discussions of driver skills and driving problems.
- B. Overhead projector used to give sight recognition of traffic signs.
- C. One lesson to deal with preventive maintenance of auto.

## Course Outline (cont.)

### V. Road Work

- A. Except for skill lesson, all driving is off-site in actual traffic environment.
- B. Students must demonstrate ability in these to pass course.
- C. If prognosis is good, extra time given in road work.

### VI. Proof of Mastery

- A. Students are able to pass driver license test.
- B. Student can meet instructor's standards in handling car.

### Completion of Goals

As of June 1, 1972 the following behavioral goals have been achieved by the students in the driver training program.

Number of students=20

February, March, April-1972

1. Performance Objectives: independent ability and skill development to handle auto as follows -

Time: 6-8 hours

- A. Controls
- B. Open highway
- C. Intersection
- D. Expressway
- E. Parking
- F. Downtown traffic

All 20 students successfully completed performance skills. This was measured by an individual check list of sub tasks in every skill area.

May 11, 1972

Driving part of course held in April, May, 1972

2. Performance Objectives: Passing of cognitive test for learners in driver training course.

- a. All 20 students successfully passed a group oral exam administered by the manager of the Secretary of State Branch Office for drivers licenses. Dort Mall - Flint, Michigan

June 1, 1972

3. Fifteen of 20 students have returned to the drivers license office with their parents, have passed the eye and sign tests and have been issued learners permits. Five more students plan on visiting the license bureau by June 15, 1972. Only 1 student who was initially enrolled may not be able to be issued a license soon without additional and special training experience with a specially equipped car, under the Vocational Rehabilitation Service. This student is severely physically handicapped due to polio encephalitis. He is being referred to Parkview Facility of the University Hospital in Ann Arbor for a diagnostic evaluation to determine ability to drive and recommendations for driver control equipment.

## LESSON ONE

### ROAD SIGNS

You can tell signs by shape, color, and words on the signs.

1. STOP SIGN (A)

A stop sign has eight (8) sides. It is always red. A stop sign has white letters on it. It says stop. You must always make your car stop next to a stop sign. You do not go again until all cars on the cross road are clear.

2. YIELD SIGN (B)

A yield sign has three (3) sides. It is yellow. It has the word yield in black on it. You do not need stop a car for a yield sign. You must give the right of way to cars on the street you are driving into. This means those cars can go first before you they are so close you might hit them.

3. WARNING SIGN (C - K)

There are many of these signs. They are diamond shaped. They are most always yellow. A warning sign means to slow down because of some danger will be coming up. Now we will study some warning signs.

4. SCHOOL CROSSING (C)

Go real slow because school kids are often crossing streets.

5. PAVEMENT NARROWS (E)

There will be a lane dropped. Slow and watch for cars going with you.

6. CURVED ARROW (F)

The road you are on will curve like the arrow. Slow down to a safe speed.

7. SIGNAL AHEAD (D)

this means a traffic red light is coming up. You will have to stop.

8. A CROSS (G)

The road you are on will have a road crossing it. Slow down if a car is at the corner.

9. A TURNED ARROW (H)

The road you are on will curve right or left like the arrow. Slow to a safe turning speed.

10. DIVIDED HIGHWAY ENDS (I)

You are on a road with a center strip. Now this will end. Traffic the other way will be just on the other side of the paint mark.

11. MERGING TRAFFIC (J)

Merging means coming into. Traffic will be coming into your street without stopping. Be ready to slow down.

12. SLIPPERY WHEN WET (K)

Your car will slip if you drive too fast. Slow down.

13. RAILROAD CROSSING (L)

A railroad sign is yellow. It is round. It has a RRR painted on it. A railroad track will cross your road. If you see a flashing red signal stop! If there are cross bars down stop!

14. EXIT 25 MPH (N)

Exit means to go off. This sign tells you where to get off the road. Slow down to 25 miles an hour.

15. PAINTED BLACK AND WHITE STRIPES (M & P)

This means the road you are on will get smaller. Slow down!

16. TWO POINTED ARROW (O)

This marks a dead end road. The road you are on will end, turn towards the right or left.

17. POINTED ARROW (Q)

This means a dead end road will be ahead, turn the way the arrow points.

18. SLOW MOVING VEHICLE (R)

This sign is bright and reflective. It will be on the back of a vehicle going 25 miles or slower. Slow down.

NAME \_\_\_\_\_

DATE \_\_\_\_\_

### PRACTICE SHEET ONE

1. How many sides does a stop sign have (A)? \_\_\_\_\_
2. How many sides does a yield sign (B) have? \_\_\_\_\_
3. What shape are warning signs? (C - K) \_\_\_\_\_
4. What shape is a railroad sign? (L) \_\_\_\_\_
5. What color is a stop sign? (A) \_\_\_\_\_
6. What color is a yield sign (B)? \_\_\_\_\_
7. What color are most warning signs? (C - K) \_\_\_\_\_
8. What color is a railroad sign? (L) \_\_\_\_\_
9. Write the word that is on a stop sign. (A) \_\_\_\_\_
10. Write the word that is on a yield sign, (B) \_\_\_\_\_
11. Write what is on a railroad sign. (L) \_\_\_\_\_
12. Draw a stop sign. (A)
13. Draw a yield sign. (B)
14. Draw a railroad sign. (L)
15. Draw a warning sign with a left turn. (H)
16. Draw a warning sign showing a lane dropped. (E)
17. Draw a railroad sign. (L)
18. Draw a warning sign showing a cross road. (G)
19. Draw a warning sign showing exit 25 mph. (N)
20. Draw a warning sign showing your road ending and left and right turn. (O)
21. What color is a vehicle sign. (R) \_\_\_\_\_
22. Draw a slow vehicle sign. (R)
23. What color is a stop sign (A)? \_\_\_\_\_
24. What color is a yield sign (B)?    Red                      White                      Yellow
25. What color are most warning signs (C - K)    Red                      White                      Yellow

NAME \_\_\_\_\_

DATE \_\_\_\_\_

### PRACTICE SHEET TWO

1. How many sides does a stop sign have? \_\_\_\_\_
2. How many sides does a yield sign have? \_\_\_\_\_
3. What shape are warning signs? \_\_\_\_\_
4. What shape is a railroad sign? \_\_\_\_\_
5. What color is a stop sign? \_\_\_\_\_
6. What color is a yield sign? \_\_\_\_\_
7. What color are most warning signs? \_\_\_\_\_
8. What color is a railroad sign? \_\_\_\_\_
9. Write the word that is on a stop sign. \_\_\_\_\_
10. Write the word that is on a yield sign. \_\_\_\_\_
11. Write the thing that is on a railroad sign. \_\_\_\_\_
12. Draw a stop sign.
13. Draw a yield sign.
14. Draw a railroad sign.
15. Draw a warning sign with a left turn.
16. Draw a warning sign showing a lane dropped.
17. Draw a railroad sign.
18. Draw a warning sign showing a cross road.
19. Draw a warning sign showing exit 25 mph.
20. Draw a warning sign showing your road ending and left and right turn.
21. What color is a slow vehicle sign. \_\_\_\_\_
22. Draw a slow vehicle sign.
23. What color is a stop sign? \_\_\_\_\_
24. What color is a yield sign?    Red                      White                      Yellow
25. What color are most warning signs?    Red                      White                      Yellow



NAME \_\_\_\_\_

DATE \_\_\_\_\_

PRACTICE SHEET THREE

1. Write the word that is on a yield sign.(B) \_\_\_\_\_
2. What color are most warning signs? (C-K) \_\_\_\_\_
3. Draw a yield sign. (B)
4. Draw a slow moving vehicle sign. (R)
5. How many sides does a stop sign have? (A) \_\_\_\_\_
6. What color is a railroad sign(L)? \_\_\_\_\_
7. Draw a cross road warning sign.(G)
8. What color is a yield sign? \_\_\_\_\_
9. Draw a stop sign (A).
10. How many sides does a yield sign have (B)? \_\_\_\_\_
11. Write what is on a railroad sign (L) \_\_\_\_\_
12. Draw a warning sign with a left turn. (H)
13. Draw a warning which shows your road ending and you can turn left or right. (O)
14. Draw a railroad sign.(A) \_\_\_\_\_
15. What color is a stop sign? (A) \_\_\_\_\_
16. What color is a slow moving vehicle sign? (R) \_\_\_\_\_
17. What color are most warning signs? (C - K) \_\_\_\_\_
18. Write the word that is on a stop sign. (A) \_\_\_\_\_
19. What color is a yield sign? (B) \_\_\_\_\_
20. Draw a warning sign showing a lane dropped (E)
21. Draw a warning sign showing exit at 25 mph. (N)
22. What shape are warning signs? (C - L)
23. What shape is a railroad sign (L) \_\_\_\_\_
24. What color is a yield sign? (B) \_\_\_\_\_

NAME \_\_\_\_\_

DATE \_\_\_\_\_

PRACTICE SHEET FOUR

1. Write the word that is on a yield sign. \_\_\_\_\_
2. What color are most warning signs? \_\_\_\_\_
3. Draw a yield sign.
4. Draw a slow moving vehicle sign.
5. How many sides does a stop sign have? \_\_\_\_\_
6. What color is a railroad sign? \_\_\_\_\_
7. Draw a cross road warning sign.
8. What color is a yield sign? \_\_\_\_\_
9. Draw a stop sign.
10. How many sides does a yield sign have? \_\_\_\_\_
11. Write what is on a railroad sign. \_\_\_\_\_
12. Draw a warning sign with a left turn.
13. Draw a warning which shows your road ending and you can turn left or right.
14. Draw a railroad sign.
15. What color is a stop sign? \_\_\_\_\_
16. What color is a slow moving vehicle sign? \_\_\_\_\_
17. What color are most warning signs? \_\_\_\_\_
18. Write the word that is on a stop sign? \_\_\_\_\_
19. What color is a yield sign? \_\_\_\_\_
20. Draw a warning sign showing a lane dropped.
21. Draw a warning sign showing exit 25 mph.
22. What shape are warning signs? \_\_\_\_\_
23. What shape is a railroad sign? \_\_\_\_\_
24. What color is a yield sign? \_\_\_\_\_

## QUIZ ONE - ROAD SIGNS

- A. If you saw a round sign beside the road you would know that:
1. The road would be slippery.
  2. A railroad would cross your road.
  3. The sign would be yellow.
  4. It would mean a traffic signal coming.
- B. If you saw a diamond shaped sign you would know that:
1. you had to stop your car.
  2. danger was coming because signs are diamond shaped.
  3. a railroad crossing was coming.
  4. the sign would be yellow.
- C. If you saw a yield sign you would know that:
1. you had to stop your car
  2. the sign would have three sides
  3. you would not have to stop, but you would give the right-of-way to cars on the other road.
  4. the sign would be a red color.
- D. If you saw a warning sign with a + on it, you would know that:
1. the sign would be diamond shaped.
  2. a bridge was coming.
  3. a road was crossing the road you are on.
  4. the sign would be round.
- E. If you saw a red shining sign on the back of a tractor you would:
1. slow down because of the tractor moving slow.
  2. follow the tractor very close.
  3. pass because the tractor might stop.
  4. know the tractor was a slow moving vehicle.
- F. If you saw a sign with the words merging traffic on it you would:
1. know that it was a yellow warning sign.
  2. speed up to get out of danger.
  3. slow down because cars might enter the road beside you.
  4. use your turn signal to warn other drivers.
- G. If you saw a sign with the words signal ahead, you would:
1. know a stop sign was coming.
  2. know the sign was a red light.
  3. know a traffic light was coming.
  4. know the sign was a yellow warning sign.

## SMALL ENGINE MECHANICS



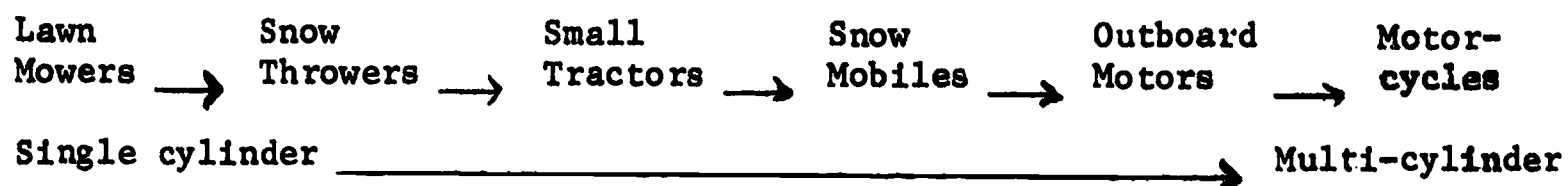
SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM

## SMALL ENGINE MECHANICS



### Course Description

The course of instruction in small engine mechanics is organized on a continuum of simple to complex mechanisms as illustrated below:



Students may proceed along the continuum to the limits of their abilities to understand increasingly complicated mechanical units. In the Special Needs Program, it is unlikely that the end-goal (multi-cylinder) will be reached, except in rare cases. The main instructional procedure is a combination of individual and small group (2-3) demonstrations, followed by individual "learn-by-doing" on actual engines. Instruction appears to be most efficient on a one-to-one teacher-pupil basis. Students learn the use of tools by immediate application after instruction.

## Performance Objectives

1. Within thirty hours of classroom and lab instruction in a well-equipped lab, the student will develop an understanding of the principles and components of a four-stroke cycle engine.
2. With the proper equipment, 15 hours of discussion, visual aids and hands-on training, the student will learn the principles of ignition and starter systems and be able to disassemble and repair either of the systems.
3. Student will be acquainted with various types of fuel systems, component parts and proper testing to diagnose system for trouble and to know how to repair.
4. In an equipped lab, the student will develop skills in tune-up procedures and techniques, and reach the expert level.
5. The student will develop the knowledge and skills needed to locate engine trouble and malfunctions.

## Course Outline

- I. Introduction to Small Engines
  - a) Major engine components
  - b) Air, fuel and exhaust system components
  - c) Ignition system components
- II. Small Engine Terminology

List of 174 terms and expressions
- III. Safety and Shop Care
  - a) Safety and the repairman
  - b) Shop Equipment
    1. Electrical
    2. Tools
    3. Air lines
    4. Turning
    5. Dangerous liquids
  - c) Shop safety
  - d) Shop Cleaning
  - e) Personal shop habits
- IV. Use and Care of Hand Tools
  - a) General mechanics tools
  - b) Use of tools
  - c) Tools operation



## Course Outline (Cont.)

### V. Threads and Fasteners

- a) Fasteners
- b) Fine threads
- c) Coarse threads
- d) Bolts, screws, units
- e) Washers
- f) Lock rings

### VI. Four-stroke Cycle Engines

- a) Components: valves, cylinders, camshafts, crankshafts, bearings, piston and rings
- b) Fuel systems: carburetion, fuel and air filter systems
- c) Ignition systems: circuits, magnetos, condensers, spark plugs, breaker points
- d) Cooling systems

### VII. Engine Tune-Up and Overhaul

- a) Testing
- b) Adjusting
- c) Disassembly
- d) Assembly

## Operational Notes

### 1. Class characteristics:

Attendance: variable; generally good  
Discipline: no major problems  
Attention: very good  
Attitude: pretty good

- 2. Special Needs students seem to be less able to transfer elements of mechanical understandings from the abstract to the real; e.g., from a picture of a carburetor to a real carburetor.
- 3. Pupils display a deep sense of responsibility and really try.
- 4. In contrast to the regular program where multi-purpose test equipment is used, the Special Needs class is better served by more simple, single-purpose units; e.g., separate volt and ohm meters, etc.

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Small Engines

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

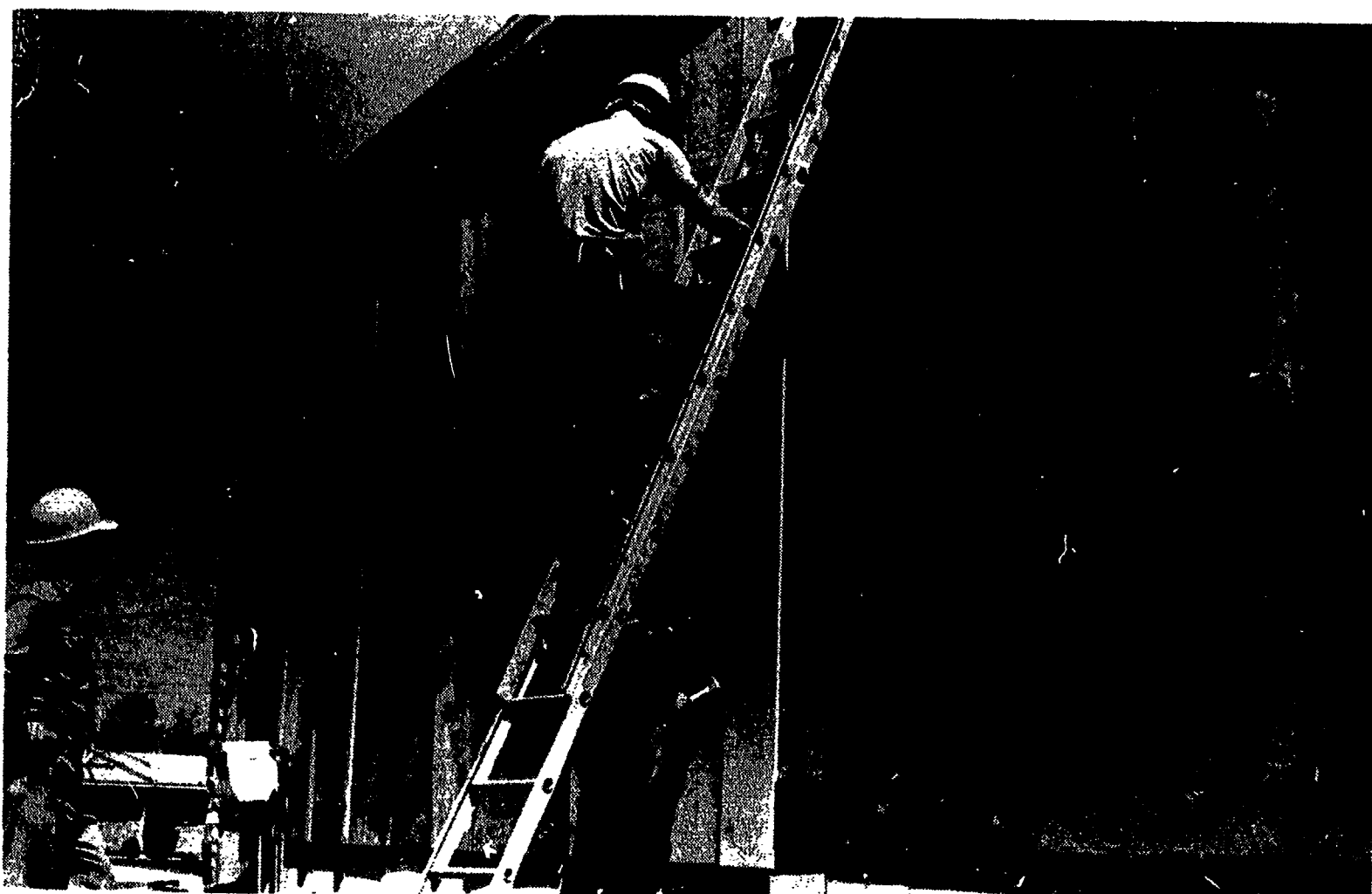
	<u>Qualified</u>	<u>Not Qualified</u>
<u>Repairing Engines</u>		
1. Deglaze cylinder . . . . .		
2. Reface valves and seats and lap. . . . .		
3. Replace main bearings. . . . .		
4. Replace oil seal . . . . .		
5. Install breaker point. . . . .		
6. Replace coil and armature. . . . .		
7. Replace armature and governor blade. . . . .		
8. Replace automatic spark advance. . . . .		
9. Replace throttle shaft brushing. . . . .		
10. Repair starter (Electric). . . . .		
11. Assemble crankshaft. . . . .		
<u>Assembling Engine</u>		
1. Disassemble engine . . . . .		
2. Spark plug-adjust gap (.025) . . . . .		
3. Fuel tank carburetor . . . . .		
4. Rope starter pulley. . . . .		
5. Blower housing . . . . .		
6. Check air gap to flywheel. . . . .		
7. Governor blade . . . . .		
8. Cylinder head and shield . . . . .		
9. Check tappet clearance . . . . .		
10. Valve and springs. . . . .		
11. Flywheel . . . . .		
12. Breaker points . . . . .		
13. Damaged seals. . . . .		
14. Cam gear and shaft . . . . .		
15. Tappets. . . . .		
16. Connecting rod and piston. . . . .		
17. Armature assembly and back plate . . . . .		
18. Crankshaft - inspect and check . . . . .		
<u>Disassembling Carburetor</u>		
1. Carburetor and linkage . . . . .		
2. Disassemble float circuit. . . . .		
3. Low and high speed circuit . . . . .		
4. Clean and assemble entire unit . . . . .		

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Ignition System</u>		
1. Battery. . . . .		
2. Magnets. . . . .		
3. Distributor. . . . .		
<u>Diagnosis of Trouble</u>		
1. Compression. . . . .		
2. Fuel Supply and flow . . . . .		
3. Ignition . . . . .		
4. Timing . . . . .		
5. Power loss . . . . .		
6. Hard Starting. . . . .		
7. Testing for operation. . . . .		
8. Trace out wiring . . . . .		
9. Trace ignition loss. . . . .		
10. Excessive exhaust smoke. . . . .		
<u>Engine tune-up and Overhaul</u>		
1. Service air cleaners . . . . .		
2. Check oil level and drain. . . . .		
3. Check compression. . . . .		
4. Remove carburetor and adjust . . . . .		
5. Check governor blade and linkage . . . . .		
6. Check flywheel, seals and flywheel key . . . . .		
7. Check breaker cover and seal . . . . .		
8. Inspect breaker points and condenser . . . . .		
9. Check coil . . . . .		
10. Install flywheel, time engine. . . . .		
11. Remove cylinder head, check gasket . . . . .		
12. Replace cylinder head - torque . . . . .		
13. Replace oil and fuel . . . . .		
14. Adjust remote control linkage. . . . .		
15. Run and adjust mixture and top speed . . . . .		

DOMESTIC APPLIANCE REPAIR



SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM



HOUSE CONSTRUCTION

## DOMESTIC APPLIANCE REPAIR



### Course Description

There are many different types of job opportunities in Domestic Appliance Repair. The student needs to acquire a broad understanding of the functions of most appliances, although he may develop a special competence in one type. In the larger shops, the appliance repairman may specialize in certain types of work. However, many small dealers seek employees who are competent in a wide range of jobs normally found in the field of appliance repair.

Much of the minor repair work of an appliance repairman will be carried on at the customer's home; therefore, acceptable personal habits of cleanliness, promptness, honesty and courtesy are mandatory.

The demand for trained workers far outweighs the supply, yet there is considerable competition for good jobs.



## Performance Objectives

Given 25 hours of classroom instruction on controls and switching devices, students will identify 100% of symbols with names of controls and switches from schematic drawings.

Given proper tools and parts, with 20 hours of class and lab time, each student will be able to gain access to relay, check relay for opens, shorts, or mechanical binding on open type relays, be able to clean and adjust contacts, if appropriate, also note positions of wires, remove defective relay if appropriate, install new relay, reconnect wires on proper contacts, check for performance to comply with manufacturer's specifications.

Each student given an appliance, proper tools, and equipment, will be able to evaluate the condition of a line cord by inspecting line cord for defective insulation, test for opens and shorts, replace defective line cord, check performance, return tools and equipment. Time required: 1/2 hour.

Each student, given an automatic washer containing an electrical defect, will be able to use a schematic diagram and appropriate test equipment to make necessary checks in a sequence of probability which will result in a rapid location of the defective component. Time required 25 hours, including instruction and lab time.

Each student, given an automatic washer with defective belt, using proper tools, will be able to inspect belt for excessive wear, fraying, flat spots, improper tensions and pulley alignment where applicable and adjust for proper tension to meet manufacturer's specifications. Time required 1 1/2 hours.

Each student given a washer which contains a suspected defective timer, using proper tools, will be able to check old timer and install new timer so that all wires will be reinstalled on the correct terminals and the timer dial is in proper calibration. Instructional time: 5 hours, student lab time: 2 hours.

Given 10 hours classroom and related lab, each student will be able to remove, repair or replace dryer blower on an automatic electric and gas clothes dryer. Given proper tools, each student will be able to gain access to blower assembly, remove blower cover, remove and inspect blower impeller, check bearings for wear, lubricate bearing, install blower assembly, check for proper alignment, replace covers and test for normal operation according to manufacturer's specifications.

Each student, given an appliance with defective heating element, will be able to:

- \* locate and gain access to heating unit
- \* check unit for open, shorts to ground, note location of wires
- \* remove defective heating unit
- \* install new heater, connect wires, and check for performance to meet manufacturer's specifications.

Each student to be able to deliver gas dryer, install the dryer according to the local code and the manufacturer's specifications using standard hand tools within two hours and also demonstrate the working gas dryer to the customer.



Given 8 hours of related instruction each student, given proper tools and equipment and a dishwasher with defective inlet valve will be able to:

- \* gain access to valve
- \* inspect for leak or malfunction
- \* remove wires and hoses, remove defective valve
- \* install new or rebuild valve, reconnect wires and hoses
- \* check for performance as outline in manufacturer's service literature

Given 20 hours of classroom and lab instruction time each student will be able to remove defective pump, inspect for leaks, noise and mechanical binding; decide if pump should be repaired or replaced; repair pump if appropriate or install new one; adjust pump belt tension, check performance to meet standards and clean and return tools and equipment.

Each student, given a dishwasher with known defective tub gasket, will be able to:

- \* gain access to gasket with proper tools and equipment
- \* be able to efficiently remove gasket retaining clamp
- \* remove old gasket, install new gasket, replace clamp
- \* adjust lid to seal
- \* test for leaks for normal operation

Each student will be able to determine thermostat failure on a built-in dishwasher. Given proper tools and equipment and with 20 hours of instructional time, the student will be able to:

- \* disconnect from source voltage
- \* gain access to thermostat, make electrical and temperature test on thermostat
- \* disconnect wire from thermostat terminals, remove thermostat
- \* install and connect replacement thermostat, reconnect source voltage
- \* check performance according to manufacturer's service manuals

## Course Outline

### UNIT I ORIENTATION

- A. Class procedure
- B. Safety (personal)
- C. Evaluation
- D. Use of tools and equipment

### UNIT II FUNDAMENTALS OF ELECTRICITY

- A. Introduction to electricity
- B. Definitions of terms
- C. Flow of electricity
- D. Electrical symbols
- E. Ohm's law
- F. Use of test equipment
- G. Introduction to future appliances

### UNIT III BASIC CONTROLS AND SWITCHES

- A. Control symbols
- B. Identification of schematic drawings
- C. Manual switching

- D. Electro-mechanical switching devices
- E. Electric timers
- F. Thermostats

#### UNIT IV RESISTANCE HEATING APPLIANCES

- A. Visual examination
- B. Theory of resistance heating
- C. Preventive maintenance
- D. Troubleshooting electrical circuits
- E. Installation
- F. Preparing work orders

#### UNIT V MOTORS FOR ELECTRICAL APPLIANCE

- A. Theory of operation
- B. Construction
- C. Advantages and disadvantages of special types of motors
- D. Preventive maintenance to extend the lifetime of specific types of operation
- E. Assembly and disassembly of motors
- F. When to repair or to replace electric motor parts or complete units

#### UNIT VI SMALL MOTOR DRIVEN APPLIANCES

- A. Theory of operation of specific appliances
- B. Symptoms of preceding trouble
- C. Efficiency in methods of troubleshooting
- D. Advantages and disadvantages in repair or replacement
- E. Introduction to power transfer assemblies

#### Operational Notes

- I. Levels of Skills or Specialties
  - A. Delivery of appliances
  - B. Installation of major appliances
  - C. Counterman or parts salesman
  - D. Specialize in small appliance repair-toasters, irons, mixers, blenders, vacuum cleaners, etc.
  - E. Specialist washer-dryer service
- II. Major Techniques of Instruction
  - A. Demonstrations followed by student lab practice
  - B. Audio-visual slides and cassette tapes
  - C. Students repairing appliances brought in from community as well as by themselves.
- III. Principle Curriculum Adaptations
  - A. Subject matter presented slower and repeated until students understand
- IV. Materials and Equipment Needed
 

Standard hand tools	Schematics	Washers
Simpson 260 meter	Heat test equipment	Dryers
Textbooks	Small appliances	

V. Observations and Comments

Attendance: usually good  
Attention: generally fair  
Discipline: excellent  
Rate: slow in most areas  
Attitude: usually deep willingness to learn  
Depth: not too good on theory-emphasis on actual skills  
Performance: rate of learning slow in most cases although given enough practice, performance of skills can be satisfactory

Use of Student Aides:

1. Provide individual instruction
2. Permit instructor to work with students having difficulty
3. Taking attendance and keeping log of daily routine
4. Setting up special lab experiments, getting materials and tools ready for demonstrations

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Appliance Repair

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Washer Service</u>		
1. Assembly and disassembly of motor . . . . .		
2. Remove and replace timer. . . . .		
3. Test and replace water inlet valve. . . . .		
4. Remove, repair or replace discharge pump. . . . .		
5. Replace and adjust belt . . . . .		
6. Trouble shoot electrical system . . . . .		
7. Lubrication . . . . .		
8. Remove, install and check timer switches. . . . .		
9. Replace agitators . . . . .		
10. Replace and adjust belts. . . . .		
<u>Dryer Service (gas and electric)</u>		
1. Replace heating elements. . . . .		
2. Install automatic dryer in a home . . . . .		
3. Remove, repair and install blower assembly. . . . .		
4. Lubrication . . . . .		
5. Remove, install, and check timer switches. . . . .		
6. Replace and adjust belts. . . . .		
<u>Dishwasher Service</u>		
1. Replace thermostats . . . . .		
2. Replace tub gasket. . . . .		
3. Remove, repair or replace discharge pump. . . . .		
4. Test and replace water inlet valve. . . . .		
5. Assembly and disassembly of motor . . . . .		
6. Lubrication . . . . .		
7. Install and adjust timer switches . . . . .		
<u>General Service (all appliances)</u>		
1. Test and replace line cord. . . . .		
2. Test, clean, adjust, or replace relays. . . . .		
3. Understanding of basic controls and switches. . . . .		

<u>Fundamentals of electricity</u>			<u>Qualified</u>	<u>Not Qualified</u>
1. Definitions of terms. . . . .				
2. Electrical symbols. . . . .				
3. Use of test equipment . . . . .				
4. Use of tools and equipment. . . . .				

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Area</u>	<u>Qualified</u>	<u>Not Qualified</u>
Appliance Repair	827.381-018	Household-Appliance Installation Man . .		
Electrical Appliances	723.381-018	Vacuum-cleaner Repairman. . . . .		
	827.281-014	Electrical-Appliance Serviceman . . . . .		
	827.884-030	Electrical-Appliance Set-Up Man . . . . .		
	827.887-010	Electrical-Appliance Serviceman Helper. .		
Gas Appliances	637.281-022	Gas-Appliance Serviceman . . . . .		
	637.884-014	Gas-Appliance Serviceman Helper. .		

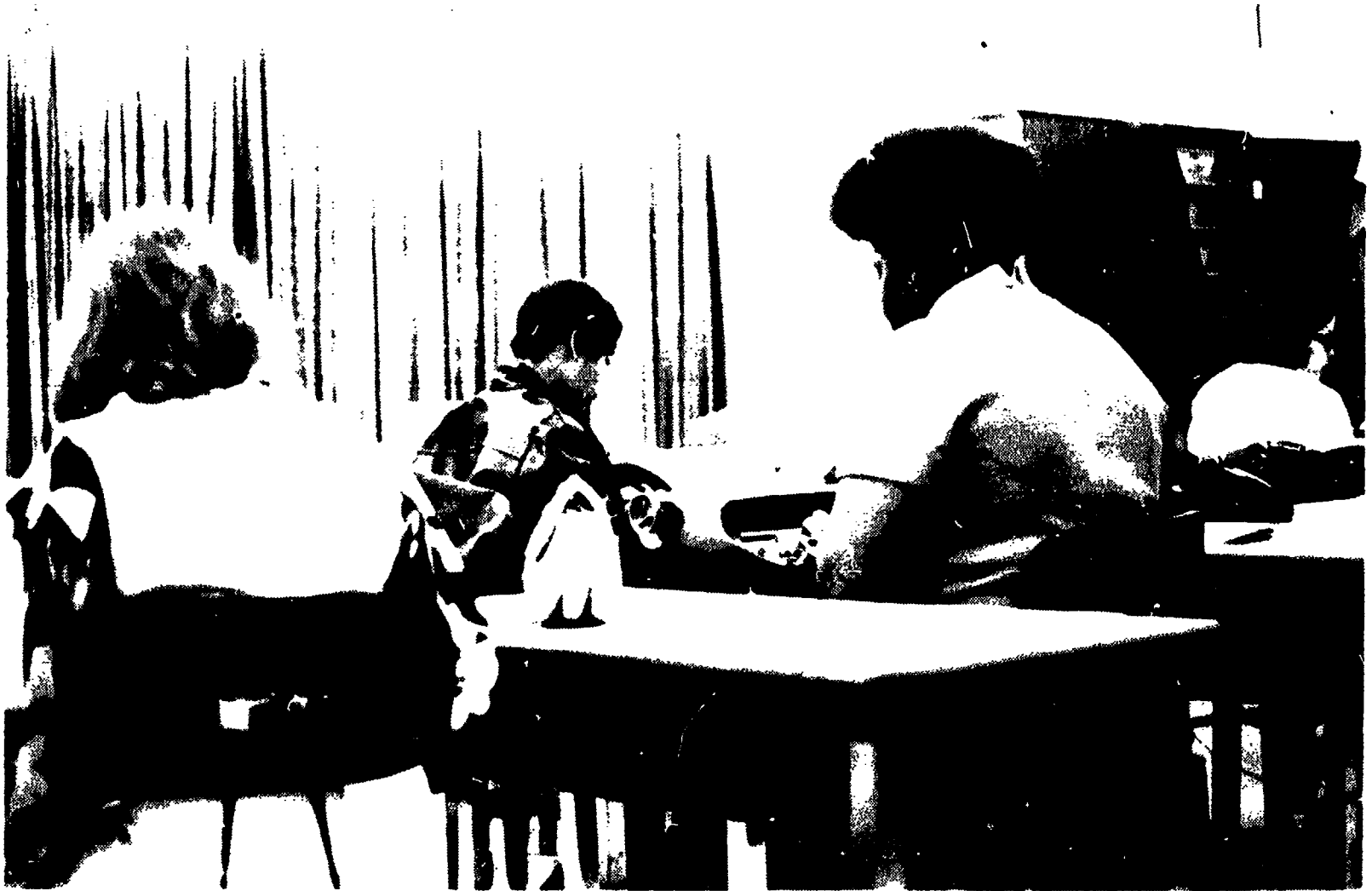
## BUSINESS OCCUPATIONS



SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM



## BUSINESS OCCUPATIONS



### Course Description

Four major skills, separate and largely independent of each other, are taught. Pupils are given the opportunity to learn each skill to the extent of their interests and abilities. In descending order of sophistication, these skills are:

- \* Typewriting
- \* Adding Machine Calculator
- \* Switchboard
- \* Ditto and Copy Machines

The usual instructional procedure is (1) total group lecture and demonstration, followed by (2) individual practice and progress. Attempts are made to tie all activities together in an office atmosphere through the project method. Negative criticism is avoided: encouragement is freely given.

## **Performance Objectives**

### **First Year**

1. Given an IBM Selectric typewriter each student will complete a one, three, and five minute timed writing at a minimum speed of 15 w.p.m. with no more than one error per minute.

### **Second Year**

1. Given an IBM Selectric typewriter each student will be able to type a business letter of 200 words or less with all errors corrected within 45 minutes.
2. Given an IBM Selectric typewriter each student will be able to type a one-page report requiring both centering and tabulation, with all errors corrected and 100% accuracy on placement within 1½ hours.
3. Given an IBM Selectric typewriter, two stencils, and a mimeograph machine with 50 sheets of mimeo paper each student will utilize these materials to complete 25 copies of a one-page project within 5 hours with 100% accuracy.
4. Given an IBM Selectric typewriter, two spirit masters, and a spirit duplicating machine with 50 sheets of duplicating paper each student will utilize these materials to complete 25 copies of a one-page project within 5 hours with 100% accuracy.
5. Given a Victor or Monroe ten-key adding machine and a test containing ten addition problems of five two digit numbers each, ten subtraction problems of three digit numbers, and ten multiplication problems of two digits, each student will be completed within 1 hour with 90% accuracy.

## **Course Outline**

### **I. Introduction to Typewriters**

- A. IBM Selectric & Model "D"
- B. Develop a healthy attitude toward fellow workers and the work world.
- C. Develop skill level in typewriting at a minimum speed of 15 words per minute of 1, 3 and 5 minute timings, with no more than 1 error per minute.
- D. Develop a skill in typing a mailable letter in 30 minutes.
- E. Develop skill in typing business forms which require centering and tabulation skills.
- F. Develop a skill in typing stencil and spirit master.
- G. Develop skill in operating fluid duplicator and mimeograph.
- H. Develop skill in operating the photo copier, folder, etc.

### **II. Introduction to Ten-Key Electric Adding Machine**

- A. Develop skill in addition, subtraction, multiplication.

- B. Time drills for speed and accuracy.
- III. Introduction to Calculators
- A. Develop skill in addition, subtraction, multiplication
  - B. Explain how adding machines are used in different jobs such as, discounts, percentage, job hourly pay scale, etc.
- IV. Introduction of Office Machines
- A. Which machine does what in an office job? Students will decide which machines to use for their own assigned projects.
- V. Introduction to the Switchboard
- A. Teach method of inter-office messages, outgoing calls, and incoming calls, office relations and what kinds of calls may be encountered.
  - B. "Operator" type of switchboard set-up.

#### Operational Notes

1. Class characteristics:

Attendance: very good  
Attention: fair  
Discipline: very good

2. The Special Needs student acquires skill at a slow rate. His eventual performance is good as long as the material or process is fresh in his mind (low retention rate).
3. Given enough time and training, the special student can be a competent office worker. Appropriate career goals will include clerk-typist, office machine operator, switchboard operator.
4. A "Business Occupations" class can be of great value to the student in getting help in needed academic skills. For instance, if a pupil happens to be low in spelling skills, the instructor will select material relating to spelling from the typing books; if a pupil is poor in grammar skills, the instructor will select practice material from typing manuals that pertains to development of better grammar skills.
5. The regular facilities and equipment are well suited to the Special Needs Program; a few additional items are desirable, including (1) overhead projector with transparencies on typing, and (2) movies on office practice. It is important, however, for the teacher to have a prior inventory of certain individual characteristics of each pupil:
- \* Spelling competency
  - \* Reading level
  - \* Emotional make-up

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Business Occupations

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	Qualified	Not Qualified
<u>Calculating</u>		
10 Key		
a. Addition . . . . .		
b. Subtraction. . . . .		
c. Multiplication . . . . .		
<u>Duplicating</u>		
1. Carbons . . . . .		
2. Fluid . . . . .		
3. Scencil . . . . .		
4. Offset. . . . .		
5. Photo . . . . .		
<u>Typing</u>		
Selectric. . . . .		
Speed _____		
1. Letters . . . . .		
2. Manuscript. . . . .		
3. Selected Forms. . . . .		
a. inner office memo. . . . .		
b. telegrams. . . . .		
c. form fill-ins. . . . .		
4. Tabulation. . . . .		
5. Spirit master . . . . .		
6. Stencil . . . . .		
7. Multilith master. . . . .		
Model "D". . . . .		
Speed _____		
1. Letters . . . . .		
2. Manuscript. . . . .		
3. Selected Forms		
a. inner office memo. . . . .		
b. telegrams. . . . .		
c. form fill-ins. . . . .		
4. Tabulation. . . . .		
5. Spirit master . . . . .		
6. Stencil . . . . .		
7. Multilith master. . . . .		

			Qualified	Not Qualified
<u>Filing</u>				
1. Alphabetic . . . . .				
2. Subject . . . . .				
3. Numeric . . . . .				
<u>Office Communications</u>				
1. telephone . . . . .				
2. switchboard . . . . .				
3. reception duties . . . . .				
<u>Grooming and Human Relations . . . . .</u>				
Occupations in which the student is qualified to work:				
<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>		
Duplicating	207.782-014	Duplicating Machine		
Machine		Operator . . . . .		
Operators	207.782-022	Mimeograph Operator. . .		
	207.782-026	Offset-Duplicating-		
		Machine Operator . . . .		
	207.782-030	Typewriter Operator		
		Automatic. . . . .		
	207.884-010	Duplicating-Machine. . .		
File Clerk	206.388-018	File Clerk . . . . .		
Clerk-Typist	209.388-022	Clerk-Typist . . . . .		

## AUTO MECHANICS



### Course Description

Auto Mechanics is a developmental program involving skills that should be learned in sequence. Beginning with basic vehicle service, the pupil proceeds to the functions of a mechanic's helper, then to apprentice mechanic, next to a system specialist (transmission tune-up, front-end, etc.), and becoming finally an automotive technician. Although the ladder of skills is open to Special Needs pupils, it is likely that most of them will acquire skills for job-placement in the first two categories; e.g., vehicle service and mechanic's helper. Numerous sub-specialities exist, among them the following:

Lubrication  
Oil change  
Battery service  
Exhaust system  
Brake repair  
Cooling system  
Wheel bearing service

Under hood inspection  
Tire balance  
Tire repair  
Shock absorbers  
Starter and generator repair  
Minor tune-up

Pupils usually work in pairs, although individual assignments are also common. Good effort and work is liberally praised and rewarded; conversely, the serious consequences of bad work are emphatically pointed out. In a reversal of regular procedure, with the Special Needs class theory follows application and practice. Necessary textbook material is read aloud by the teacher. Demonstration and actual experience is the predominant teaching procedure.



### **Performance Objectives**

All students after studying safety rules, having practical operating equipment which requires special safety precautions, and being observed by the instructor, will minimize accidents to person and vehicle.

All students will be able to clean, lubricate by hand-packing or pressure-packing, and adjust a wheel bearing with the proper adjustment using an inch-pound torque wrench in 30 minutes or less.

Most students will be able to pressure-test, reverse-flush using a pressure flusher, and service the cooling system with no leaks, install the proper amount of antifreeze and test this solution with an antifreeze tester in two hours or less.

All students will be able to service a battery using necessary tools to remove and install, clean the battery with a soda solution, test the battery charge with a hydrometer and add the proper amount of water within 20 minutes.

All students will be able to mount a new tire on a rim using a tire changer, bead expander and other necessary tools without leaks in ten minutes or less.

Most students will be able to change a complete exhaust system using an air chisel impact wrench and other necessary hand tools without leaks and rattles in less than 90 minutes.

The student must be able to change oil and filter on various automobiles using necessary tools installing proper amount and type of oil in 20 minutes or less without any leaks.

The students will be able to lubricate all grease fittings with the proper amount of lubricant on an automobile using a pressure grease gun, performing various inspections and services described in the lubrication procedures sheet in a maximum time of 45 minutes.

Some advanced students will be able to perform a minor tune-up, which includes spark plug and distribution service, as well as compression testing, set ignition timing, and adjust the carburetor, make all adjustments according to manufacturers specifications with the aid of an AC engine tester in less than 2 1/2 hours.

To prepare a car for resale, all students using proper cleaning materials will be able to thoroughly clean interior and exterior of a car as well as perform the necessary safety and service inspections in less than 4 hours as outlined in "Customer Comfort, Assurance and Vehicle Safety Check" procedure.

Eighty per cent of the students will be able to test a vehicle's headlights using the AC headlight aimer, compensate for unlevel floor, and adjust all headlights to manufacturer's specifications in a maximum time of 30 minutes.

## Course Outline

- I. Orientation
  - A. Explore program
  - B. Job opportunities
- II. Safety
  - A. Personal safety
  - B. Shop safety
- III. Shop orientation
  - A. Shop tools and equipment
  - B. Hand tools
  - C. Safety equipment
- IV. Wheel Bearing and Seal Service
  - A. Types of bearings
  - B. Removal and installation
  - C. Lubrication
  - D. Rear wheel bearing service
- V. Cooling System Service
  - A. Function of cooling system
  - B. Components
  - C. Testing the system
  - D. Servicing the system
- VI. Battery Service
  - A. Removal and installation
  - B. Cleaning
  - C. Heating
  - D. Charging
- VII. Tire Service
  - A. Types of tire repair
  - B. Tire balance
  - C. Shock absorbers
- VIII. Exhaust System Service
  - A. Components
  - B. Heat control valve
  - C. Procedure for removing and installing parts
  - D. Air tools

## IX. Vehicle Lubrication and Service

- A. Lube equipment
- B. Procedure
- C. Oil change
- D. Miscellaneous checks

## X. Starting Motors

- A. Disassembly and assembly
- B. Testing
- C. Armature turning
- D. Starter drives

## XI. Brake Service

- A. Minor adjustments
- B. Drum service
- C. Wheel cylinder repair
- D. Reline brakes

## XII. PCU System

- A. Purpose
- B. Testing procedures and repairs

## XIII. Minor Tune-Up

- A. Plug service
- B. Distribution service and ignition timing
- C. Compression testing
- D. Carburetor adjustment

## Operational Notes

### 1. Class characteristics:

Attendance: generally good; several individual problems  
Attention: fair to good  
Discipline: OK  
Attitude: good

- 2. Rate of skill learning is slow, but, given enough repetitive practice, performance can be quite satisfactory.
- 3. Individual gauges and test equipment are preferable to the multi-purpose electronic engine analyzers. Attention must be given in the laboratory and, hopefully, in related classes to two important items:
  - a. Nomenclature and automotive terminology: reading and spelling
  - b. Ability to use parts catalog as needed

**4. Use of Teacher Aides:**

- a. Provide individual instruction**
- b. Permit instructor to work with students having difficulty**

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Area: Auto Mechanics

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	Qualified	Not Qualified
<u>Wheel Bearing and Seal Service</u>		
1. Adjust front bearing . . . . .		
2. Inspect and lubricate. . . . .		
3. Replace front bearings and race. . . . .		
4. Replace rear bearings. . . . .		
<u>Tire and Wheel Service</u>		
1. Tire rotation. . . . .		
2. Tire change. . . . .		
3. Tire repair. . . . .		
4. Tire balance		
a. bubble. . . . .		
b. hunter-on car . . . . .		
c. bear-off car. . . . .		
5. Replace shock absorbers. . . . .		
<u>Vehicle Lubrication Service</u>		
1. Oil change . . . . .		
2. Filter change. . . . .		
3. Lubrication. . . . .		
<u>Exhaust System Service</u>		
1. Remove and install parts . . . . .		
2. Heat control valve service . . . . .		
3. Power wrench and chisel. . . . .		
<u>Headlight Aiming (AC Aimers)</u> . . . . .		
<u>Cooling System Service</u>		
1. Test thermostat. . . . .		
2. Test antifreeze protection . . . . .		
3. Replace heater and radiator hose . . . . .		
4. Flush system . . . . .		
5. Replace thermostat . . . . .		
<u>Battery Service</u>		
1. Removal. . . . .		
2. Cleaning . . . . .		
3. Testing - hydrometer . . . . .		
- capacity . . . . .		
- cell test. . . . .		
- 3 min. charge. . . . .		
4. Installation . . . . .		

	<u>Qualified</u>	<u>Not Qualified</u>
<u>Starter Service</u>		
1. Removal . . . . .		
2. Testing . . . . .		
3. Overhaul. . . . .		
4. Installation. . . . .		
<u>Brake Service</u>		
1. Minor adjustments . . . . .		
2. Drum service. . . . .		
3. Wheel cylinder repair . . . . .		
4. Relinement. . . . .		
<u>PCV Service</u>		
1. Replace valve . . . . .		
2. Replace filter. . . . .		
3. Test system (AC tester) . . . . .		
<u>Motor Mount Replacement</u>		
1. Inspect mount . . . . .		
2. Replace broken parts. . . . .		
<u>Used Car Prep</u>		
1. Vacuum interior . . . . .		
2. Wash and wax. . . . .		
3. Safety inspection . . . . .		
4. Underhood inspection. . . . .		
<u>Windshield wiper service</u>		
1. Replace blades. . . . .		
2. Install washer solvent. . . . .		
<u>Minor Tune-Up</u>		
1. Plug service. . . . .		
2. Distribution service and ignition timing. . . . .		
3. Compression testing . . . . .		
4. Carburetor adjustment . . . . .		

Occupations in which the student is qualified to work:

<u>Area</u>	<u>D.O.T. Number</u>	<u>Specific Job</u>	<u>Qualified</u>	<u>Not Qualified</u>
<u>Automotive Services</u>				
	806.381-034	New-Car Get Ready Man . .		
Mechanics	620.281-014	Automobile Mechanic . . .		
	620.281-018	Automobile Tester . . . .		
	620.381-014	Automobile Service Mechanic. . . . .		
	620.884-010	Automobile-Mechanic Helper. . . . .		



## AUTO BODY MECHANICS



SPECIAL NEEDS STUDENTS INTEGRATED INTO THE REGULAR PROGRAM

## AUTO BODY MECHANICS



### Course Description

The curriculum of the Auto Body Mechanics course is divided into two main skill areas, each with an array of sub-skills.

#### Bumping

Sheet metal finishing  
Rough of sheet metal  
Use of grinder and other power  
tools  
Panel replacement

#### Painting

Top coat spraying  
Primer surfacer spraying  
Wet sanding  
Feather edging  
Cleaner operations

The Special Needs pupil may "climb the ladder, " so to speak, in each division to the limit of his ability. Instructional techniques are described as:

- \* Specific and direct
- \* Immediate practice after demonstration
- \* Short total class sessions
- \* No homework

- \* Demonstration
- \* Oral Communication
- \* Individual assistance
- \* Actual work in cars

## **Performance Objectives**

The student will be able to interpret technical information as needed to restore the damaged car to its original condition.

The student will know the reasons for stressing safety in the body shop and how the tools and equipment present a potentially hazardous situation.

The student will be able to select the necessary cleaning agent, coated abrasives, and compounds.

The student will be able to braze sheetmetal in the flat, horizontal and vertical positions.

The student will be able to select the correct tools and perform the operations necessary to correct damaged sheet metal.

The student will be able to apply plastic fillers, sand, smooth and restore the damaged sheet metal to its original condition.

The student will be able to properly clean, sand, prime, and apply the finish coat of paint in accordance with the manufacturer's specifications.

The student will be able to perform the following sequence: clean the surface, sand, apply primer surfacer, apply top coat, finish polishing and detailing, mask, and maintain spray-painting equipment.

## **Course Outline**

### **I. Orientation**

- A. Requirements for entrance into the Auto Body Repair trade
  - Mastery of practical skills
  - Comprehension of technical and related information
- B. Personal traits, necessary and/or desirable:
  - Patience
  - Appearance
  - Cooperation
  - Physical condition
  - Industry
  - Initiative
  - Consideration of others
  - Reliability and trustworthiness
- C. Opportunities in Auto Body Repair
  - Types of jobs
  - Places of employment
  - Compensation

### **II. Safety Practices; Shop Hazards**

- A. Hand tools
- B. Power tools

### III. Materials

- A. Preparation
  - Sandpaper, various grits
  - Rubbing compounds
  - Cleaning agents
- B. Metals
  - Characteristics of steel
  - Sheet metal work

### IV. Finishing

- A. Cleaner operations
- B. Feather edging
- C. Wet sanding
- D. Primer surfacer spraying
- E. Top coat spraying

### V. Bumping

- A. Dinging small dents
- B. Filling with plastic filler
- C. Sanding operations

### VI. Welding

- A. Brazing

### Operational Notes

#### 1. Class characteristics:

Attendance: majority good; few poor  
Attention: majority good  
Discipline: good  
Attitude: good

#### 2. The rate of learning of skills is slow; eventual performance is good.

#### 3. Use of Teacher Aides:

- a) Help set up shop
- b) Supervise
- c) Drive cars in and out
- d) Set examples for students

4. The facilities and equipment are appropriate without modification or additions for teaching the Special Needs class. Supplementary teaching aids are needed. Color slides, 16 mm motion pictures, 8 mm continuous loops and simplified printed materials are particularly helpful.

Video tapes of regular day classes are used for instruction and presenting training problems. These types show damaged cars, step-by-step repair procedures, and the refinished automobile.

Transparencies are used with an overhead projector accompanied by oral drill and class discussion. Nomenclature of tools and equipment is taught in this manner.

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
Job Competence Profile

Date \_\_\_\_\_

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City State Zip Code

Birth Date \_\_\_\_\_ Grade \_\_\_\_\_ Home School \_\_\_\_\_ Phone \_\_\_\_\_

	Qualified	Not Qualified
<u>Refinishing</u>		
1. Maintain and care for spray equipment. . . . .		
2. Clean with wax and grease remover. . . . .		
3. Spray primer surface . . . . .		
4. Mix paint and spray. . . . .		
5. Featheredge. . . . .		
6. Wet sand . . . . .		
7. Dry sand . . . . .		
8. Spray acrylic lacquer - panel repair . . . . .		
9. Spray acrylic lacquer - spot repair. . . . .		
10. Spray enamel . . . . .		
11. Use masking paper and tape efficiently . . . . .		
12. Compound, polish, touch-up and detail. . . . .		
<u>Bumping</u>		
1. Select tools needed. . . . .		
2. Metal finish small dents . . . . .		
3. Use hydraulic equipment. . . . .		
4. Shrink stretched metal . . . . .		
5. Fill with plastic filler . . . . .		
<u>Welding</u>		
1. Set up and light torch . . . . .		
2. Braze sheet metal in flat position . . . . .		
3. Braze sheet metal in vertical position . . . . .		
4. Use cutting torch to remove bumpers. . . . .		

Occupations in which the student is qualified to work			Qualified	Not Qualified
Area	D.O.T. Number	Specific Job		
Body and Fender	807.287-010	Automobile - body repairman . . . . .		
	845.781-018	Painter, Automobile . . . . .		



## STUDENT PERSONNEL SERVICE

The following is a summary of the areas of responsibility of the Student Personnel Service.

### A. Admissions - Fall and Summer Program

1. Coordinate identification of potential individuals for various instruction programs. Work with the following persons at the home school:
  - a. Special education teacher
  - b. Counselor
  - c. Parents
2. Student evaluations
  - a. Testing
  - b. Progress profiles
3. Counseling
  - a. Student-occupations, job readiness, adjustment
  - b. Teachers-regarding school progress and supportive efforts from school
  - c. Parents-general program and projected occupational goals and ultimately, job placement
  - d. Employers-regarding job placement and/or training. Help them understand the handicapped and the individual aptitudes of potential employees.
  - e. Job placement
  - f. Follow-up job placement to determine satisfaction or problem areas.

### B. Evaluation of the ongoing program

## PLACEMENT AND PROGRAM COUNSELOR

### Duties

- A. The Placement and Program Counselor is necessary to handle student behavior or discipline problems. He refers problems for counseling to the psychologist or program coordinator. He is a member of the Skill Center Staff who does not teach. The need for this person is very important to the operation of the Program. He supervises transportation, such as the loading and unloading of buses at the Skill Center, as well as student behavior outside the classroom, such as in the lounge or in the halls. He coordinates the transportation of students. He will also act as a liason between the home and the school.
- B. At least half-time, this person works on business and industrial-orientation of student enrollment, and development of training stations for placement of those students who have sufficient entry level skills for jobs.

He counsels students, especially in relation to interview techniques, grooming, completion of data and application forms, and also works with agencies who may assist in the placement function.

- C. This person is in charge of the supervision of the Instructional Aides. He is a full-time employee, a type "C" consultant with a knowledge of vocational education.

#### Performance Objectives

- A. The student will understand the value and necessity of work as shown by his expressing a positive desire to work.
- B. The student will develop habits and attitudes necessary for permanent employment as shown by:
  - 1. His personal appearance always being clean and neat.
  - 2. Always being on time for class unless unusual conditions prohibit.
- C. The student will develop skills to secure employment as shown by:
  - 1. Being able to respond to questions in a simulated interview.
  - 2. Being able to list the skills he is able to perform as a result of his training at the Genesee Area Skill Center.
  - 3. Being able to fill out job applications forms which includes the following information:
    - a. Name: first, last, middle.
    - b. Address: number, street, city, state, zip code.
    - c. Birth date: year, month, day.
    - d. Place of birth: city, state.
    - e. Age.
    - f. Sex.
    - g. Social Security number.
    - h. School last attended.
    - i. Highest grade completed.
    - j. Work experience.
    - k. Two personal references.
    - l. Written signature, (legal name.)

SPECIAL NEEDS PROGRAM  
PLACEMENT STATISTICS  
June 1972

A job orientation program was begun in February with all Health Occupations students working 2 days a week at the Kith Haven Nursing Home under the direct supervision of the Special Needs instructor, who is a registered nurse.

The Placement Program Counselor (type C - Special Education Certification) position was filled February 28, 1972. About this time, the entire Automobile Mechanics class participated in a 3 week orientation program at Applegate Chevrolet Company under the supervision of the regular Auto Mechanic teacher.

Listed below are statistics showing the students' participation in the work orientation program and job placement totals near the end of the third phase program.

Placement Totals

Seniors enrolled - Special Needs Program . . . . .	25
Seniors enrolled - Regular Program - Special Needs . . . . .	13
Total	38

Orientation Program

Number Participating (all related jobs) . . . . .	30
---------------------------------------------------	----

Special Needs Program - N = 25

Related jobs . . . . .	10
Non-related jobs . . . . .	3
Related advanced training . . . . .	3
Armed Services . . . . .	0
Total Placed	16

Regular Program - Special Needs Program N = 13

Related jobs . . . . .	4
Non-related jobs . . . . .	2
Related advanced training . . . . .	4
Armed Services . . . . .	1
Total Placed	11

During the summer Special Needs, Phase 3A program, 1972, 90% of the total seniors (38) will be placed, or on a job orientation program. Because of the completion of driver training by many of these students, more stress will be placed upon job placement during this phase.

## PSYCHOLOGIST

### Duties

The Psychologist serves as assistant to the program coordinator. He continues to provide a consistency of programs between various school districts, the Skill Center, parents, students, teachers, etc. Preferably the individual is a qualified school psychologist, as well as having a basic background of vocational programs, along with knowledge of vocational rehabilitation procedures.

This individual assists in the development of procedures and forms such as skill profile, instructor's diagnosis and recommendations, personal characteristic profiles, student progress reports, specific skill progress forms and/or any other materials needed to provide prescriptive goals for the instructors as well as students.

### Final Report: Psychological Services and Student Information

The Special Needs Summer Program ran from June 21, 1971 through August 13, 1971 with a total of 69 students in attendance. Of that total, 32 were from Flint city schools and 37 were from county schools. Nineteen were black students and 49 were white and 1 was American Indian.

Out of this total number of students, four are enrolled at the Ferris State College 8 week clerical program: 6 did not complete the program: 4 because of poor attendance and 1 because of employment and 1 because of emotional problems.

Out of the total number of 69 enrolled, 23 of these were new students entering the first time in the diagnostic program.

### Services Provided to Students

1. Certified disability information on all students for the computerized student information program as well as the state report.
2. Gathered school counselor information forms to assist in counseling and programming of student.
3. Secured and updated all psychological reports and information for students enrolled in summer program as well as students entering the Fall '71 program.
4. Followed up to responsible school districts for whatever information was required by the Special Needs Program for students enrolled in the Phase 3 program.
5. Worked cooperatively with the local district D.V.R. office concerning information on students enrolled in the summer program who are D.V.R. clients. This information consisted of such things as student progress, evaluations, placements, possible need for transportation monies, tools, and any other services which were needed by participating students who were D.V.R. clients.
6. Advised the program coordinator of any needed changes in present program procedures.

7. Advised teachers, program coordinator and placement personnel on possible problems or difficulties of the students in the training program.
8. Administered psychological tests on students.
9. Counseled with students and assisted in discipline problems.

## Appendix A

### CHRONOLOGY OF THE SPECIAL NEEDS PROGRAM

#### Program Funding

The Special Needs Program is funded by the State Department of Vocational Education in Cooperation with the Division of Special Education and Vocational Rehabilitation Service. Funds are received for a handicapped program through the State from the Federal Government under the Vocational Education Act of 1963, ammended in 1968.

#### Student Eligibility

Students to be served are mainly the Educable Mentally Retarded who can succeed in one of the training courses offered. When spaces permit, the physically impaired student will also be considered for entry into the program.

#### Student Selection Guidelines

Students entering the 11th grade will have first preference and 10th grade second. A minimum of 2 years, including summers, is usually needed to provide the trainee with basic and salable job skills. Students must be 16 years of age, or within 4 months of age 16, at the time of entry into the program.

#### Summer Program

All enrolled students are expected to attend the summer program to continue the continuity of skill building. It is sometimes possible to serve students on a diagnostic evaluation basis during the summer program, if spaces permit.

#### Course Selection

It is not always possible to give the students first choice upon entry into the Skill Center program. It is urged that the student participate in a related occupational area, so he may learn basic attitudes and skills. Students currently enrolled will receive preference in moving into different occupational areas when openings occur. In some situations students not succeeding in the course area will be transferred to an area in which their success may be achieved.

#### Counseling and Placement

Counseling services are available to the student as well as an Industrial-Orientation Program of a short duration when students have mastered basic skills. The Placement Service of the Special Needs Program will also assist the student in job placement upon successful completion of the training program.

#### Student Costs

There are usually no costs for training, materials, instruction for the student. There is a \$5.00 enrollment fee to insure attendance for the summer program. This fee is returned to the student within 60 days of successful completion of the summer program.

#### Program Length

At the present time the school program runs for 35 weeks, the summer program for 8 weeks.



Phase 1: February - May, 1970: 13 weeks

Exploratory experiences. For the first five weeks of Phase 1, the students were exposed to a variety of skill areas by attending specially designed mini-courses, each for a duration of 90 minutes. A total of twenty course offerings were explored in this fashion.

Basic skill development. Following the exploratory units, each student selected a course of instruction for eight weeks of basic skill development. Girls chose Beauty Culture and Business Occupations. Boys entered Auto Body Repair, Welding, Automotive Service, and Small Engine Repair.

Phase 1A: June - August, 1970: 8 weeks

The purpose of Phase 1A was to provide an opportunity for continuation of the skill development begun in the previous phase. Six course offerings were included:

Small Engine Mechanics  
Auto Body Mechanics  
Auto Mechanics

Welding  
Beauty Culture  
Office Training

Phase 2: September - June, 1970-71: 35 weeks

Phase 2 represented the first full-year cycle of the Special Needs Program. Students formerly enrolled in the program had preference in assignment to Phase 2 in order to continue developing skills to a level of employability. New students were enrolled as space permitted. Total enrollment 101. The following courses were included in Phase 2:

Automobile Mechanics - Various phases of automotive repair and service including engine carburetion, cooling, ignition, electrical systems, differentials, brakes and steering.

Automobile Body Mechanics - Repair of body and chassis, roughing, bumping, metal finishing, panel replacement, frame straightening, welding, touch soldering, heat shrinking, and trim and hardware mechanics.

Small Engine Mechanics - Training in the repair and maintenance of various types of small engines and equipment including lawnmowers, scooters, out-board motors.

Intensive Office Training - Basic office skill for beginning students; for advanced students, individual assistance in the various phases of office operations such as machine transcription, record-keeping, fundamentals, duplicating methods, machine calculating.

Welding - Gas and car welding and machine work in the cutting of materials. Various materials and types of welds, welding electrodes, symbols and classifications of steels.

Beauty Culture - Science of an skill development in the care of the hair, nails, and skin; wig styling is also included.

Plant Maintenance - Study of and participation in the upkeep of a typical school plant. Maintenance standards of building and grounds combined with the day-to-day upkeep of a building.

Landscaping and Floriculture - Study of general lawn care, flower arranging, care of indoor and outdoor plants such as shrubs, trees, and house plants.

Health Occupations - An exploratory program designed to acquaint interested students with the opportunities available in the Health field. Information about and experience in nursing, medical technology.

Graphic Arts - Job planning and layout, cold composition, pasteup, line and halftone photography, stripping a flat, platemaking, offset press work, and bindery.

Phase 2A: June - August, 1971: 8 weeks

The purpose of Phase 2A was to provide an opportunity for continued continuity of basic skills development as well as a diagnostic evaluation program for new students. Number of students completing Phase 2A - 69.

Twelve students were enrolled in the regular summer school courses of Graphic Arts, Landscaping, and Plant Maintenance. The balance of the students were enrolled in the Special Needs course offerings of Health Occupations, Business Occupations, Auto Mechanics, Beauty Culture, Small Engine Mechanics, and Auto Body Mechanics.

Phase 3: September - June, 1971-72: 35 weeks

Phase 3 instruction time increased to 1 3/4 hours in the third session and accommodated 126 students. In addition, there were 12 deaf students, 12 E.M.R. students moved into the regular AM-PM program from the third session plus an additional 25 students with physical handicaps in the regular program.

An industrial Orientation work experience program began in January, 1972 with advanced students. The Placement Service also began functioning in March, 1972 with several successful placements.

The purpose of the program was to serve 3 levels of students: advanced, training toward entry employment skills; second year, continued training in basic employable skills; beginners, training past the diagnostic level into basic skill development.

Courses offered were: Auto Mechanics, Auto Body Mechanics, Small Engine Mechanics, Welding, Plant Maintenance. Landscaping, Domestic Appliance Repair, Graphic Arts, Business Occupations, and Health Occupations.

Phase 3A: June - August, 1972: 8 weeks

Phase 3A will provide an opportunity for students on the first and second level to continue a continuity of skill development. Those students in the advanced level will be encouraged to return for placement readiness at work experience program. New students will be accommodated where possible for a diagnostic evaluation. Courses offered will be those offered in Phase 3A.

Program 4: September 5 - June 15, 1972-73: 39 weeks

Program 4 will be offered daily in the second of 4 sessions being planned at the Skill Center for 1972-73. The time will be 10:40 A.M. to 12:10 P.M. Monday thru Friday for 7 1/2 hours of instruction time weekly for a full school year of 39 weeks.

Recommended: 1 credit (Carnegie unit) per semester

Students already participating will have preference on enrollment, preference of entry will next be given to students in the 11th grade.

A maximum of 125 students will be accommodated in the Special Needs second session. It is estimated that another 25-30 students who have qualifying handicaps will be enrolled in other sessions.

In the Special Needs Session, courses offered will be in the areas of Graphic Arts, Business Occupations, Health Occupations, Auto Mechanics, Auto Body Mechanics, Commercial truck Mechanics, Small Engine Mechanics, Welding and Plant Maintenance.

## **APPENDIX B**

### **Operational Forms**

**Memorandum to Parents and School Personnel**

**Students Pre-Application and Course Offerings Form**

**Student Enrollment Sheet**

**Psychological Form**

**Student Personal Qualification Form**

**Occupational Related Evaluation Form**

**Curriculum Log**

Memorandum to Parents and School Personnel

To: Parents of Participating Students and School Personnel, Responsible for Special Needs Program.

Subject: Special Needs Program - Genesee Area Skill Center.

From: Marshall Mossman, Program Coordinator.

It is anticipated that the Special Needs Program, in operation the last two and one-half years at the Skill Center, will continue in the summer and fall 1972. Students eligible to participate must be mentally and physically handicapped, and range in age from 16 to 19. Information concerning the fall program will be sent as soon as the fall schedule is definite.

SUMMER PROGRAM

Length: 8 weeks  
Beginning Date: June 21, 1972  
Ending Date: August 13, 1972  
Time: 10:30 - 1:00 P.M.  
Credit: Recommended ½ credit  
(Carnegie Unit)

FALL PROGRAM

Length: 39 weeks  
Beginning Date: September 7, 1972  
Ending Date: June 13, 1973  
Time: 10:40 A.M. - 12:10 P.M.  
Credit: Recommended 1 credit per  
Semester - 2 per year  
(Carnegie Unit)

Areas of evaluation and training to be offered if sufficient interest is shown:

- |                                |                         |
|--------------------------------|-------------------------|
| 1. Auto Mechanics (2 sections) | 6. Business Occupations |
| 2. Auto Body Mechanics         | 7. Health Occupations   |
| 3. Small Engine Mechanics      | 8. Graphic Arts         |
| 4. Welding                     | 9. Plant Maintenance    |
| 5. Commercial Truck Mechanics  |                         |

Students presently in the program will have preference of available openings. Applications have been distributed to these students. New students will be added to the program depending on availability of openings, for a diagnostic evaluation for possible full time entry into the program. If there is over-enrollment, the quota system per district will be used to determine student eligibility.

Please identify new students interested in attending, complete application blanks and forward to the Skill Center no later than April 20, 1972. There is a \$5.00 enrollment fee required for the Summer Program, which must accompany the application when returned to the Skill Center. Checks should be made payable to the Genesee Area Skill Center. Those students successfully completing the summer course will be mailed refunds in 30 to 60 days after the program.

School personnel please complete the following as applicable. All new students must have completed the: (1) Regular Skill Center Enrollment Sheet, (all programs), (2) pre-application and course offering form (pink) to indicate desired courses and, (3) confidential information form (E.M.R. PH., etc.). This is for the summer and fall programs, 1972.

Students already enrolled in 1971-72 and completing their program successfully, and who desire to enroll in the summer must complete only the form (2) pre-application (pink). However, all three forms must be completed for the separate Program 4, fall 1972-73. Please make any comments that would be beneficial on an appropriate form. New enrollees must have a copy of transcript and Psychological Information. School personnel will be notified on enrollment as soon as possible.

Student transportation will need to be arranged at each local school district through school, parents, and students.

Vacations: Students may miss one week of the summer program for vacations. However, it may not be the first week of summer school and must be arranged with the teacher and approved by the Program Coordinator.



Genesee Area Skill Center  
Special Needs Program

Students Pre-Application and Course Offerings Form

Name \_\_\_\_\_  
Last First Middle

Address \_\_\_\_\_  
Street City Zip Code

The following courses will be offered based on student participation. Place a 1, 2, and 3, opposite your 1st, 2nd, 3rd, choices: (The 3 digit number preceding the course is the course number)

☐ 221 Automotive Mechanics - Study of automotive repair and service including safety tools and equipment, wheel bearing and seal service, cooling system, battery, tire, exhaust system, lubrication, starting motors, brake service, P.C.U. system and minor tune up.

☐ 224 Auto Body Mechanics - Repair of body parts such as roughing, bumping, metal finishing, panel replacement, welding, torch soldering, heat shrinking, trim and hardware mechanics.

☐ 223 Small Engine Mechanics - Repair and maintenance of various types of small engines and equipment including lawn mowers, scooters, outboard motors, etc.

☐ 194 Welding - Gas and arc welding. It is taught with machine work in the cutting of material. Various materials and types of welds, welding electrodes, symbols and classifications of steels is also covered.

☐ 188 Plant Maintenance - Actual participation in the upkeep of a typical school plant. Maintenance standards of buildings and grounds are covered along with the day to day upkeep of a building.

☐ 111 Landscaping - Includes study of turf-grass industry, greenhouse operation, ground maintenance, bedding plant and nursery production, arboriculture, and general landscape practices.

☐ 191 Domestic Appliance Service - Repair of household appliances, small equipment, automatic washers, dryers, stoves, dishwashers, etc. Basic electricity, simple electrical circuits, reading electrical diagrams, and use of testing equipment are also covered.

☐ 154 Graphic Arts - Includes job planning and layout, cold composition, pasteup, line, and halftone photography, stripping a flat, platemaking, offset press work and bindery.

☐ 163 Business Occupations - Includes introductory to typewriters, 10 key electric adding machines, calculators, general office machines, and switchboard operations.

☐ 126 Health Occupations - An exploratory program designed to acquaint interested students with the opportunities available in the health field especially nurse aides and orderly's. Included will be experience in maintaining health, recognizing illnesses, bedmaking, medicines, bedside care and simple treatments.

Applicant's Signature \_\_\_\_\_

Parent or Guardian's Signature \_\_\_\_\_

Date \_\_\_\_\_

NOTE: Counselors, this form is to be used for students to indicate sequence of choices in applying for courses at the Genesee Area Skill Center. Please include this form with student's official application form. This is not an official enrollment form.

NM:df72



## Genesee Area Skill Center

D.P. \_\_\_\_\_  
(GASC only)

Date \_\_\_\_\_

## Student Enrollment Sheet

PLEASE TYPE OR PRINT IN INK.

NOTE: Counselor must complete all information thoroughly. Consult student or parent if necessary. This form is the official enrollment for the Regular and Special Needs Program. Information will be used for Required Student Personnel Information by the State, and also will be available to each constituent high school.

School \_\_\_\_\_

Grade \_\_\_\_\_

(When Beginning Skill Center Course)

Program-Check one: Regular \_\_\_\_\_  
(AM-PM)Regular Special Needs \_\_\_\_\_  
(AM-PM)

Special needs only \_\_\_\_\_

Student No. \_\_\_\_\_  
(Place GASC 5 digit Course No. Here.)Course \_\_\_\_\_  
(Name from Course Schedule Sheet)Name \_\_\_\_\_  
Last First MiddleAddress \_\_\_\_\_  
Street No. City Zip CodePhone No. \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Birth date: \_\_\_\_\_ Age \_\_\_\_\_  
Mo./day/yearRace 1.) Am. Indian \_\_\_\_\_ 2.) Negro \_\_\_\_\_ 3.) Oriental \_\_\_\_\_ 4.) Spanish Am. \_\_\_\_\_ 5.) White or other \_\_\_\_\_  
(Check one)Confidential Information For Professional Use Only

Information for Special Services: Please read carefully and check anything which applies to the student. If none applies, please check the box marked (X) NONE at the bottom of the page.

A Diabetes _____	J Anemia _____
B Rheumatic fever _____	K Tuberculosis _____
C Arthritis, Rheumatism _____	L Polio or Paralysis _____
D Bone, joint, muscle problem _____	M Heart impairment: past or present _____
E Speech Defect, stuttering or stammering _____	N Back problem _____
F Cerebral Palsy _____	O Hearing limitations: one ear( ) both( ) _____
G Muscular Dystrophy _____	P Multiple Sclerosis _____
H Asthma-requiring medication _____	Q Emotional Problem-Under Professional treatment _____
I Excused from Gym ( ) Why _____	R Convulsions, seizures, fainting, or under _____
	S medical care: past or present _____

T Limited use of only part of your body; describe: \_\_\_\_\_

U ( ) other not listed, (describe) \_\_\_\_\_

V ( ) NONE of the above applies to student

List all special medications that GASC should know about for emergency purposes. \_\_\_\_\_

Parent Name \_\_\_\_\_  
Last First Address of Parent if different from above

Signature of Student (date) \_\_\_\_\_

Signature of Principal or Counselor (date) \_\_\_\_\_

Attach current Transcript of grades. NOTE: Counselors of students enrolling under the Special Needs Program must complete information on Student Evaluation Form and attach. Counselor, use back of enrollment form for any additional comments that would be helpful in counseling the student.

MM:df

CONFIDENTIAL INFORMATION FOR PROFESSIONAL USE ONLY

GENESEE AREA SKILL CENTER

SPECIAL NEEDS PROGRAM

TO: Special Education Personnel

The following information must be completed by the Special Education Teacher or Counselor for the student to be considered for entry into the Special Needs Program at the Skill Center. Attach this sheet to the application form and also include the students file of student information, such as, psychologicals, specific physical information, transcript and other relevant information which will help the Special Needs Staff in serving the handicapped student.

Verification of disability information is required by authorized personnel of the State Funding Agencies for the Special Needs Program.

Student Name: Last First Initial School  
Disability: E.M.R. Physically handicapped  
(Check whatever applies) Specify

Please rate the above student on the following characteristics by circling the appropriate number.

	Below	Average	Above	
Personal Grooming (Neglected)	← 1 2 3 4 5 →	(Cares)		
Social Maturity (Mixes well)	← 1 2 3 4 5 →	(Avoids peer group)		
Physical Health (Often ill)	← 1 2 3 4 5 →	(Few absences)		
Academic Motivation (Needs direction)	← 1 2 3 4 5 →	(Works independently)		
Emotional Stability (Low tolerance)	← 1 2 3 4 5 →	(Self control)		
Home Environment (Poorly adjusted)	← 1 2 3 4 5 →	(Stable)		
Acceptance of Rules (Breaks or Avoids)	← 1 2 3 4 5 →	(Observes rules)		

Specify any additional special services that are being provided this student by school or social agencies, i.e. N.Y.C., P.C.P., Speech, ADC, welfare, etc. \_\_\_\_\_

Signature: Teacher, Counselor, or Principal

Position

Date

(For additional comments, use back of sheet.)

MM:th 2/72

GENESEE AREA SKILL CENTER

G-5081 S. Torrey Rd.

Flint, Mich. 48507

NAME \_\_\_\_\_  
LAST FIRST MIDDLE

ADDRESS \_\_\_\_\_  
STREET CITY ZIP CODE

SCHOOL \_\_\_\_\_ GRADE \_\_\_\_\_ COUNSELOR \_\_\_\_\_

Date of Birth \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Phone \_\_\_\_\_

Course (Training or Evaluation Area) \_\_\_\_\_

USE FOLLOWING SPACE FOR ADDITIONAL COMMENTS AFTER FILLING OUT EVALUATION ON BACK

ADDITIONAL COMMENTS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Rated by \_\_\_\_\_ Title \_\_\_\_\_

Date \_\_\_\_\_ Supervisor \_\_\_\_\_

**STUDENT PERSONAL QUALIFICATIONS  
SPECIAL NEEDS PROGRAM - GENESEE AREA SKILL CENTER**

	Always	Nearly Always	Usually	Sometimes	Seldom
1. Can follow directions					
2. Does follow directions					
3. Accepts constructive criticism					
4. Associates well with fellow students					
5. Associates well with instructor					
6. Anticipates work activities to be done					
7. Does student like the work:					
8. Satisfactory personal appearance (hair, make up, cleanliness)					
9. Attends class regularly					
10. Arrives to class on time					
11. Is a steady worker					
12. Works without supervision					
13. Takes pride in work					
14. Takes care of tools and other equipment (with which he works)					
15. Observes classroom rules and regulations					
16. Observes safety rules and regulations					
17. Is courteous					
18. Satisfactory quality of work					
19. Satisfaction with the student's progress					
20. Do you feel the student can be suitably employed in this area of work:					

OCCUPATIONAL RELATED EVALUATION  
SPECIAL NEEDS PROGRAM - GENESEE AREA SKILL CENTER

		Good	Adequate	Inadequate	Poor
SOCIAL SKILLS	1. Self-expression-communicates, ask for assistance, questions				
	2. Sociability-interacts with other students				
	3. Work independence-works without supervision or guidance				
	4. Appearance-cleanliness, good mannerisms, neatness in appearance				
	5. Personal independence-motivation adequate, initiates meaningful activities				
TIME FACTORS	1. Pace-performs at a consistent rate of speed				
	2. Attendance-reliable in attendance and punctuality				
	3. Multiple-performs several activities at near same time				
	4. Timing-performs scheduled activities; is aware of time				
PERFORMANCE SKILLS	1. Accuracy-performs within well defined tolerances				
	2. Dexterity-makes fine manipulations, coordinated movements				
	3. Choices-selects among alternatives, makes decisions				
	4. Direction-follows procedures, instructions or directions				
	5. Memory-remembers locations, procedures, nomenclatures				
	6. Caution-uses care in activities, which pose personal hazard				
TOLERANCE	1. Repetitiveness-has tolerance for monotony				
	2. Perseverance-performs continuously over normal periods				
	3. Stamina-has physical stamina, strength, resists fatigue				

GENESEE AREA SKILL CENTER  
SPECIAL NEEDS PROGRAM  
CURRICULUM LOG

The following information is to be compiled by the Instructional Aide, placed in the curriculum notebook and turned in Thursday afternoon or by 8:30 P.M. each Friday. When holidays affect the schedule, the log should be handed in the last instructional day of the week.

Program Week No. \_\_\_\_\_ Date \_\_\_\_\_, 197\_ to \_\_\_\_\_, 197\_

MONDAY - DATE \_\_\_\_\_

List the actual skills or topics covered.

- \_\_\_\_\_ 1. Related "Book Work"  
"Academic Class Room  
Instruction)
- \_\_\_\_\_ 2. Practical "Instruction"  
(Organized instruction  
in Lab.)
- \_\_\_\_\_ 3. Practical "Hands On"  
(Student working time  
in Lab.)
- \_\_\_\_\_ 4. Maintenance (Shop cleanup,  
etc.)

100% % of Class (75 min.)

TUESDAY - DATE \_\_\_\_\_

- \_\_\_\_\_ 1.
- \_\_\_\_\_ 2.
- \_\_\_\_\_ 3.
- \_\_\_\_\_ 4.

WEDNESDAY - DATE \_\_\_\_\_

- \_\_\_\_\_ 1.
- \_\_\_\_\_ 2.
- \_\_\_\_\_ 3.
- \_\_\_\_\_ 4.

THURSDAY - DATE \_\_\_\_\_

- \_\_\_\_\_ 1.
- \_\_\_\_\_ 2.
- \_\_\_\_\_ 3.
- \_\_\_\_\_ 4.

Please comment on any special activities occurring during the week, such as field trips, team teaching, student growth or anything of special nature.